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OM protein - protein search, using sw model

Run on: April 8, 2004, 15:30:06; Search time 43.3077 Seconds

(without alignments)

71.766 Million cell updates/sec

Title: US-09-787-443A-12

Perfect score: 11

Sequence: 1 ARQKTMKPRRS 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1586107 seqs, 282547505 residues

Word size:

Total number of hits satisfying chosen parameters: 22883

Minimum DB seq length: 11 Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Database: A Geneseq_29Jan04:*

1: geneseqp1980s:*

2: geneseqp1990s:*

3: geneseqp2000s:*

4: geneseqp2001s:*

5: qeneseqp2002s:*

6: geneseqp2003as:*

7: geneseqp2003bs:*

8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

R	esult		% Query				
	No.	Score	Match	Length	DB	ID	Description
	1	11	100.0	11	3	AAY88540	Aay88540 NCAM Ig1
	2	11	100.0	11	5	ABG69340	Abg69340 Human neu
	3	4	36.4	11	2	AAR71762	Aar71762 Neurotens
	4	4	36.4	11	2	AAR71761	Aar71761 Neurotens
	5	4	36.4	11	4	AAB45669	Aab45669 Neurotens
	6	4	36.4	11	6	AAE32335	Aae32335 Human vas
	7	3	27.3	11	1	AAP50941	Aap50941 Hepatitis
	8	3	27.3	11	1	AAP50942	Aap50942 Hepatitis
	9	3	27.3	11	2	AAR05292	Aar05292 Amino aci

10	3	27.3	11	2	AAR14095	Aar14095 Pre-S(1-1
11	3	27.3	11	2	AAR14094	Aar14094 Pre-S(1-1
12	3	27.3	11	2	AAR24065	Aar24065 Cell-to-c
13	3	27.3	11	2	AAR28129	Aar28129 Cell-to-c
14	3	27.3	11	2	AAR28133	Aar28133 Cell-to-c
15	3	27.3	11	2	AAR24066	Aar24066 Cell-to-c
16	3	27.3	$\overline{11}$	2	AAR28134	Aar28134 Cell-to-c
17	3	27.3	11	2	AAR28271	Aar28271 Cell-to-c
18	3	27.3	11	2	AAR24067	Aar24067 Cell-to-c
19	3	27.3	11	2	AAR28270	Aar28270 Cell-to-c
20	3	27.3	11	2	AAR28128	Aar28128 Cell-to-c
21	3	27.3	11	2	AAR28135	Aar28135 Cell-to-c
	3	27.3	11	2	AAR28130	Aar28130 Cell-to-c
22	3	27.3	11	2	AAR24068	Aar24068 Cell-to-c
23				2	AAR24000 AAR28131	Aar28131 Cell-to-c
24	3	27.3	11	2	AAR28131 AAR28132	Aar28132 Cell-to-c
25	3	27.3	11	2		Aar44847 Lactoferr
26	3	27.3	11		AAR44847	Aar40877 SSP for f
27	3	27.3	11	2	AAR40877	Aar40877 SSF for f
28	3	27.3	11	2	AAR40874	Aar40878 SSP for f
29	3	27.3	11	2	AAR40878	
30	3	27.3	11	2	AAR67084	Aar67084 Sweet pep
31	3	27.3	11	2	AAR71764	Aar71764 Neurotens
32	3	27.3	11	2	AAR71763	Aar71763 Neurotens
33	3	27.3	11	2	AAR52676	Aar52676 Fragment
34	3	27.3	11	2	AAR55785	Aar55785 Human car
35	3	27.3	11	2	AAR55788	Aar55788 Human car
36	3	27.3	11	2	AAR84118	Aar84118 Equine he
37	3	27.3	11	2	AAR79902	Aar79902 Human FK-
38	3	27.3	11	2	AAW21352	Aaw21352 Gastrin p
39	3	27.3	11	2	AAW21355	Aaw21355 Gastrin p
40	3	27.3	11	2	AAR73972	Aar73972 CD28 deri
41	3	27.3	11	2	AAR64665	Aar64665 HPF3 pept
42	3	27.3	11	2	AAR90612	Aar90612 Lactoferr
43	3	27.3	11	2	AAR87615	Aar87615 Lactoferr
44	3	27.3	11	2	AAW49555	Aaw49555 Human leu
45	3	27.3	11	2	AAR91858	Aar91858 Lactoferr
46	3	27.3	11	2	AAR96425	Aar96425 Hepatitis
47	3	27.3	11	2	AAR96424	Aar96424 Hepatitis
48	3	27.3	11	2	AAR96834	Aar96834 N.gonorrh
49	3	27.3	11	2	AAR96835	Aar96835 Human neu
50	3	27.3	11	2	AAW10520	Aaw10520 Lactoferr
51	3	27.3	11	2	AAW10518	Aaw10518 Lactoferr
52	3	27.3	11	2	AAW00844	Aaw00844 PERB11-4D
53	3	27.3	11	2	AAW24272	Aaw24272 Antifunga
54	3	27.3	11	2	AAW10445	Aaw10445 Human gro
55	3	27.3	11	2	AAW10434	Aaw10434 Human gro
56	3	27.3	11	2	AAW10451	Aaw10451 Human gro
57	3	27.3	11	2	AAW10433	Aaw10433 Human gro
58	3	27.3	11	2	AAW10459	Aaw10459 Human gro
59	3	27.3	11	2	AAW10441	Aaw10441 Human gro
60	3	27.3	11	2	AAW10453	Aaw10453 Human gro
61	3	27.3	11	2	AAW25322	Aaw25322 Peptide c
62	3	27.3	11	2	AAW25307	Aaw25307 Peptide c
63	3	27.3	11	2	AAW09807	Aaw09807 N-termina
64	3	27.3	11	2	AAW11150	Aaw11150 CD4 pepti
65	3	27.3	11	2	AAW39790	Aaw39790 Mammalian
66	3	27.3	11	2	AAW66283	Aaw66283 SMR1 pept
	9	_,		_		

67	3	27.3	11	2	AAW53849	Aaw53849	Protein k
68	3	27.3	11	2	AAW38368	Aaw38368	Human pla
69	3	27.3	11	2	AAY30260	Aay30260	KDR/Flk-1
70	3	27.3	11	2	AAY30265	Aay30265	KDR/Flk-1
71	3	27.3	11	2	AAW96333	Aaw96333	Human ery
72	3	27.3	11	2	AAY30081	Aay30081	A complem
73	3	27.3	11	2	AAY45419	Aay45419	Immunogen
74	3	27.3	11	2	AAY42687	Aay42687	HHV-6 var
75	3	27.3	11	2	AAW73368	Aaw73368	Human PAF
76	3	27.3	11	2	AAY39668	Aay39668	Tat-inhib
77	3	27.3	11	2	AAY33120	Aay33120	Zinc fing
78	3	27.3	11	2	AAY25088	Aay25088	Transduct
79	3	27.3	11	2	AAY25090	Aay25090	Transduct
80	3	27.3	11	2	AAY25076	Aay25076	Transduct
81	3	27.3	11	2	AAY25087	Aay25087	Transduct
82	3	27.3	11	2	AAY25086	Aay25086	Transduct
83	3	27.3	11	2	AAY07255		Lactoferr
84	3	27.3	11	3	AAY78318	Aay78318	MMP prope
85	3	27.3	11	3	AAY51589	=	HIV-1 der
86	. 3	27.3	11	3	AAY68389		Rainbow t
87	3	27.3	11	3	AAY93554		Amino aci
88	3	27.3	11	3	AAY93552	-	Amino aci
89	3	27.3	11	3	AAY93553		Amino aci
90	3	27.3	11	3	AAY93556	=	Amino aci
91	3	27.3	11	3	AAY93545	-	Amino aci
92	3	27.3	11	3	AAB14521		Sterile a
93	3	27.3	11	3	AAY83526		Peptide f
94	3	27.3	11	3	AAB20662		Plasma HI
95	3	27.3	11	3	AAY78450		Human gro
96	3	27.3	11	3	AAY78444		Human gro
97	3	27.3	11	3	AAY78437	_	Human gro
98	3	27.3	11	3	AAY78456		Human gro
99	3	27.3	11	3	AAY78442		Human gro
100	3	27.3	11	3	AAY78433	Aay78433	Human gro

ALIGNMENTS

```
RESULT 1
AAY88540
     AAY88540 standard; peptide; 11 AA.
ID
XX
AC
    AAY88540;
XX
     07-AUG-2000 (first entry)
DT
XX
     NCAM Ig1 binding peptide #12.
DE
XX
     NCAM; neural cell adhesion molecule; Ig1; immunoglobulin domain 1;
KW
     neurite outgrowth promoter; proliferation; nerve damage; sclerosis;
KW
     impaired myelination; stroke; Parkinson's disease; memory; schizophrenia;
KW
     Alzheimer's disease; diabetes mellitus; circadian clock; nephrosis;
KW
     treatment; prosthetic nerve guide; treatment; nervous system.
KW
XX
os
     Synthetic.
XX
```

```
WO200018801-A2.
PN
XX
     06-APR-2000.
PD
XX
                     99WO-DK000500.
     23-SEP-1999;
PF
XX
                     98DK-00001232.
     29-SEP-1998;
PR
                     99DK-00000592.
     29-APR-1999;
PR
XX
     (RONN/) RONN L C B.
PΑ
     (BOCK/) BOCK E.
PΑ
     (HOLM/) HOLM A.
     (OLSE/) OLSEN M.
PA
     (OSTE/) OSTERGAARD S.
PΑ
     (JENS/) JENSEN P H.
PΑ
      (POUL/) POULSEN F M.
PA
      (SORO/) SOROKA V.
PA
PA
      (RALE/) RALETS I.
     (BERE/) BEREZIN V.
PA
XX
```

Ronn LCB, Bock E, Holm A, Olsen M, Ostergaard S, Jensen PH; Poulsen FM, Soroka V, Ralets I, Berezin V;

WPI; 2000-293111/25.

PI

PI XX

DR XX

PT

PT

PT XX

PS XX

CC

CC XX Compositions that bind neural cell adhesion molecules useful for treating disorders of the nervous system and muscles e.g. Alzheimer's and Parkinson's diseases.

Example 4; Page 25; 119pp; English.

Neural cell adhesion molecule (NCAM) is a cellular adhesion molecule. NCAM is found in three forms, two of which are transmembrane forms, while the third is attached via a lipid anchor to the cell membrane. All three NCAM forms have an extracellular structure consisting five immunoglobulin domains (Ig domains). The Ig domains are numbered 1 to 5 from the Nterminal. The present sequence represents a peptide which binds to the NCAM Ig1 domain. The peptide can be used in a compound which binds to NCAM-Iq1/Iq2 domains, and is capable of stimulating or promoting neurite outgrowth from NCAM presenting cells, and is also capable of promoting the proliferation of NCAM presenting cells. The compound may be used in the treatment of normal, degenerated or damaged NCAM presenting cells. The compound may in particular be used to treat diseases of the central and peripheral nervous systems such as post operative nerve damage, traumatic nerve damage, impaired myelination of nerve fibres, conditions resulting from a stroke, Parkinson's disease, Alzheimer's disease, dementias, sclerosis, nerve degeneration associated with diabetes mellitus, disorders affecting the circadian clock or neuro-muscular transmission and schizophrenia. Conditions affecting the muscles may also be treated with the compound, such as conditions associated with impaired function of neuromuscular connections (e.g. genetic or traumatic shock or traumatic atrophic muscle disorders). Conditions of the gonads, pancreas (e.g. diabetes mellitus types I and II), kidney (e.g. nephrosis), heart, liver and bowel may also be treated using the compound. The compound is used in a prosthetic nerve guide, and also to stimulate the ability to learn, and to stimulate the memory of a subject

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100.0%; Score 11; DB 3; Length 11;
  Query Match
                                  Pred. No. 9.3e-06;
                          100.0%;
  Best Local Similarity
                                0; Mismatches
                                                                 0; Gaps
                                                                              0;
                                                   0; Indels
           11; Conservative
            1 AROKTMKPRRS 11
Qу
              1 ARQKTMKPRRS 11
Db
RESULT 2
ABG69340
     ABG69340 standard; peptide; 11 AA.
ID
XX
AC
     ABG69340;
XX
     21-OCT-2002 (first entry)
DT
XX
     Human neural cell adhesion molecule (NCAM) peptide #12.
DE
XX
     Human; neural cell adhesion molecule; NCAM; heart muscle cell survival;
KW
     acute myocardial infarction; central nervous system disorder; stroke;
KW
     peripheral nervous system disorder; postoperative nerve damage;
KW
     traumatic nerve damage; spinal cord injury; nerve fibre; schizophrenia;
KW
     postischaemic damage; multiinfarct dementia; multiple sclerosis;
KW
     nerve degeneration; diabetes mellitus; neuro-muscular degeneration;
KW
     Alzheimer's disease; Parkinson's disease;
KW
     Huntington's disease. atrophic muscle disorder; gonad degeneration;
KW
KW
     nephrosis.
XX
OS
     Homo sapiens.
XX
PN
     WO200247719-A2.
XX
PD
     20-JUN-2002.
XX
     12-DEC-2001; 2001WO-DK000822.
PF
XX
     12-DEC-2000; 2000DK-00001863.
PR
XX
PΑ
     (ENKA-) ENKAM PHARM AS.
XX
     Bock E, Berezin V, Kohler LB;
ΡI
XX
     WPI; 2002-583473/62.
DR
XX
     Use of a compound comprising a peptide of neural cell adhesion molecule,
PT
     in the preparation of medicament for preventing death of cells presenting
PT
     NCAM or NCAM ligand and treating central nervous system diseases.
PT
XX
     Disclosure; Page 16; 57pp; English.
PS
XX
     The invention relates to use of a compound (I) comprising a peptide which
CC
     comprises at least 5 contiguous amino acid residues of a sequence of the
CC
     neural cell adhesion molecule (NCAM), its fragment, variant or its mimic,
CC
     for the preparation of a medicament for preventing death of cells
CC
```

SO

Sequence 11 AA;

```
presenting the NCAM or an NCAM ligand. (I) is useful in the preparation
CC
     of a medicament for preventing death of cells presenting the NCAM or an
CC
     NCAM ligand. The medicament is for the stimulation of the survival of
CC
     heart muscle cells, such as survival after acute myocardial infarction.
CC
     The medicament is for the treatment of diseases or conditions of the
CC
     central and peripheral nervous system, such as postoperative nerve
CC
     damage, traumatic nerve damage, e.g. resulting from spinal cord injury,
CC
     impaired myelination of nerve fibres, postischaemic damage, e.g.
CC
     resulting from a stroke, multiinfarct dementia, multiple sclerosis, nerve
CC
     degeneration associated with diabetes mellitus, neuro-muscular
CC
     degeneration, schizophrenia, Alzheimer's disease, Parkinson's disease and
CC
     Huntington's disease. The medicament is for the treatment of diseases or
CC
     conditions of the muscles including conditions with impaired function of
CC
     neuro-muscular connections, such as genetic or traumatic atrophic muscle
CC
     disorders, and for the treatment of diseases of conditions of various
CC
     organs, such as degenerative conditions of the gonads, pancreas (e.g.
CC
     diabetes mellitus type I and II) and kidney (e.g. nephrosis). ABG69329-
CC
     ABG69352 represent human NCAM peptides of the invention
CC
XX
SQ
     Sequence 11 AA;
                          100.0%; Score 11; DB 5; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 9.3e-06;
                                                  0; Indels
                                                                 0; Gaps
                                                                             0;
           11; Conservative
                                 0; Mismatches
Qу
            1 ARQKTMKPRRS 11
              Db
            1 ARQKTMKPRRS 11
RESULT 3
AAR71762
     AAR71762 standard; peptide; 11 AA.
ID
XX
AC
     AAR71762;
XX
DT
     25-MAR-2003 (revised)
DT
     15-MAY-1995 (first entry)
XX
DE
     Neurotensin receptor fluorescent probe.
XX
     Neurotensin; NT; receptor; probe; fluorescent.
KW
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Key
FT
     Modified-site
                     /note= "Tyr or D-Tyr; and this residue is N-acylated with
FT
                     fluorescent label. See CC below. Also this amino acid can
FT
                     be substituted by Lys or Orn."
FT
XX
     EP606804-A2.
PN
XX
PD
     20-JUL-1994.
XX
     27-DEC-1993;
                    93EP-00403185.
PF
XX
```

```
30-DEC-1992;
                    92CA-02086453.
PR
XX
     (UYMC-) UNIV MCGILL.
PΑ
XX
     Beaudet A, Faure M, Gaudreau P;
PΙ
XX
     WPI; 1994-226757/28.
DR
XX
     New forescent markers for neurotensin receptors - useful for in vitro
PΤ
     labelling of neurotensin receptors on cell surface and to isolate
РΤ
РΤ
     neurotensin-receptor expressing cells.
XX
     Claim 2; Page 5; 19pp; English.
PS
XX
     The invention concerns highly sensitive fluorescent probes which allow
CC
     for rapid and precise characterisation of neurotensin receptor binding
CC
     properties on whole cells. The probes are of formula R1-C(=X)-R in which
CC
     R1 is is a fluorophore chosen from fluorescein, rhodamine, Blue
CC
     fluorescent and Texas red; X is oxygen or sulphur; and R is a neurotensin
CC
     -type polypeptide sequence containing the core sequence Arg-Arg-Pro-Tyr-
CC
     Ile-Leu or Arg-Arg-Pro-Trp-Ile-Leu. Specific sequences are given in
CC
     AAR71745 - AAR71772. The R1-CX- acyl group is linked to the peptide via
CC
     the N-terminus in position 1. The N-terminal amino acid may also be
CC
     substd. by Lys or Orn. The present sequence represents one of the claimed
CC
     peptide sequences for R. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SO
     Sequence 11 AA;
                          36.4%; Score 4; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 6.3e+02;
  Best Local Similarity
                                                                              0;
                               0; Mismatches
                                                       Indels
                                                                  0; Gaps
                                                    0;
            4; Conservative
            7 KPRR 10
Qу
              1111
            4 KPRR 7
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     AAR71761 standard; peptide; 11 AA.
ID
XX
     AAR71761;
AC
XX
DT
     25-MAR-2003
                  (revised)
     15-MAY-1995
                  (first entry)
DT
XX
     Neurotensin receptor fluorescent probe.
DE
XX
     Neurotensin; NT; receptor; probe; fluorescent.
KW
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Key
FT
     Modified-site
                     /note= "Tyr or D-Tyr; and this residue is N-acylated with
FT
                     fluorescent label. See CC below. Also this amino acid can
FT
                     be substituted by Lys or Orn."
FT
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XX
     EP606804-A2.
PN
XX
     20-JUL-1994.
PD
XX
     27-DEC-1993;
                    93EP-00403185.
PF
XX
     30-DEC-1992;
                    92CA-02086453.
PR
XX
     (UYMC-) UNIV MCGILL.
PΑ
XX
     Beaudet A, Faure M,
                          Gaudreau P;
PΙ
XX
     WPI; 1994-226757/28.
DR
XX
     New forescent markers for neurotensin receptors - useful for in vitro
PT
     labelling of neurotensin receptors on cell surface and to isolate
PT
     neurotensin-receptor expressing cells.
PT
XX
     Claim 2; Page 5; 19pp; English.
PS
XX
     The invention concerns highly sensitive fluorescent probes which allow
CC
     for rapid and precise characterisation of neurotensin receptor binding
CC
     properties on whole cells. The probes are of formula R1-C(=X)-R in which
CC
     R1 is is a fluorophore chosen from fluorescein, rhodamine, Blue
CC
     fluorescent and Texas red; X is oxygen or sulphur; and R is a neurotensin
CC
     -type polypeptide sequence containing the core sequence Arg-Arg-Pro-Tyr-
CC
     Ile-Leu or Arg-Arg-Pro-Trp-Ile-Leu. Specific sequences are given in
CC
     AAR71745 - AAR71772. The R1-CX- acyl group is linked to the peptide via
CC
     the N-terminus in position 1. The N-terminal amino acid may also be
CC
     substd. by Lys or Orn. The present sequence represents one of the claimed
CC
     peptide sequences for R. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SO
     Sequence 11 AA;
                           36.4%; Score 4; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 6.3e+02;
  Best Local Similarity
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
             4; Conservative
                               0; Mismatches
  Matches
            7 KPRR 10
Qу
               I \cup I
            4 KPRR 7
Db
RESULT 5
AAB45669
     AAB45669 standard; peptide; 11 AA.
TD
XX
AC
     AAB45669;
XX
     09-MAR-2001 (first entry)
DT
XX
     Neurotensin peptide analog #2.
DE
XX
     Vasoactive intestinal peptide; somatostatin; neurotensin; diagnosis;
KW
     polymethine dye; fluorescence; detection; tumor; adenoma; esophagus;
KW
     gastrointestinal tract; bronchial tract; bladder; cervix; breast;
KW
```

```
optical mammography; optical tomography.
KW
XX
     Unidentified.
OS
XX
PN
     DE19917713-A1.
XX
     19-OCT-2000.
PD
XX
     09-APR-1999;
                   99DE-01017713.
PF
XX
                   99DE-01017713.
     09-APR-1999;
PR
XX
     (DIAG-) INST DIAGNOSTIKFORSCHUNG GMBH.
PΑ
XX
     Licha K, Becker A, Semmler W, Wiedenmann B, Hessenius C;
PΙ
     Volkmer-Engert R, Schneider-Mergener J;
PI
XX
     WPI; 2001-000423/01.
DR
XX
     New conjugates of vasoactive intestinal peptide, somatostatin or
PT
     neurotensin peptides and polymethine dyes are used for e.g. in-vivo
PT
     fluorescence diagnosis of tumors and other diseased tissues.
PT
XX
     Claim 17; Page 17; 32pp; German.
PS
XX
     This invention describes novel conjugates (I) of vasoactive intestinal
CC
     peptide (VIP), somatostatin or neurotensin peptides and polymethine dyes.
CC
     The products of the invention can also be used for a diagnostic method
CC
     comprising administering (I) to a patient, either intravenously or to the
CC
     bronchi by inhalation or to the gastrointestinal tract, esophagus or
CC
     bladder by spraying and then washing out excess (I), and then performing
CC
     an endoscopic investigation by local excitation of fluorescence at an
CC
     excitation wavelength of 350-1200 nm and site-specific detection of the
CC
     fluorescence emitted by the dye. (I) are useful for in-vivo diagnosis of
CC
     tumors, other diseased tissues or adenomas by means of optical detection
CC
     procedures, in-vivo fluorescence diagnosis of tumors, tumor cells and/or
CC
     inflammatory tissues by means of endoscopic procedures in the
CC
     gastrointestinal tract, esophagus, bronchial tract, bladder or cervix or
CC
     for in-vivo fluorescence and/or absorption diagnosis of breast tumors by
CC
     means of optical mammography (transillumination or optical tomography of
CC
     the breast). The peptide component provides receptor-specific binding to
CC
     target tissues and the polymethine dye provides a fluorescence signal
CC
     that is detectable with high sensitivity
CC
XX
SQ
     Sequence 11 AA;
                          36.4%; Score 4; DB 4; Length 11;
  Query Match
                          100.0%; Pred. No. 6.3e+02;
  Best Local Similarity
                                                                              0;
                               0; Mismatches 0; Indels
                                                                     Gaps
             4; Conservative
  Matches
            7 KPRR 10
QУ
              1111
Db
            5 KPRR 8
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RESULT 6 AAE32335

```
AAE32335 standard; peptide; 11 AA.
ID
XX
AC
     AAE32335;
XX
     24-MAR-2003 (first entry)
DT
XX
     Human vascular endothelial growth factor (VEGF) peptide #5.
DE
XX
     Vascular endothelial growth factor; VEGF; angiogenesis; wound healing;
KW
     bone growth; osteoporosis; osteoarthritis; bone reconstruction; ulcer;
KW
     lesion; injury; trauma; periodontal condition; protein therapy; human.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO200283851-A2.
XX
     24-OCT-2002.
PD
XX
PF
     10-APR-2002; 2002WO-US011406.
XX
     10-APR-2001; 2001US-00832355.
PR
XX
PA
     (GENV-) GENVEC INC.
XX
PΙ
     Kovesdi I, Kessler PD;
XX
DR
     WPI; 2003-075536/07.
XX
     New fusion protein comprising a non-heparin-binding vascular endothelial
PT
     growth factor (VEGF) peptide portion and a non-VEGF peptide portion,
PT
     useful for promoting angiogenesis and/or bone growth in mammals.
PT
XX
     Disclosure; Page 120; 191pp; English.
PS
XX
     The invention relates to a fusion protein comprising non-heparin binding
CC
     vascular endothelial growth factor (VEGF) peptide portion and a non-VEGF
CC
     peptide portion useful for promoting angiogenesis and/or bone growth in
CC
CC
     mammalian host. The fusion protein is useful for promoting angiogenesis,
     wound healing and bone growth. Compositions containing bone growth
CC
     promoting fusion protein can be used to treat osteoporosis, rheumatoid or
CC
CC
     osteoarthritis, to improve poor bone healing, to promote implant
     integration and function of artificial joints and to facilitate bone
CC
     reconstruction. They can also be used to treat e.g. ulcers, lesions,
CC
     injuries, burns, trauma, periodontal conditions, lacerations and other
CC
     conditions. The invention is also useful in protein therapy. The present
CC
CC
     sequence is human VEGF peptide
XX
SQ
     Sequence 11 AA;
                          36.4%; Score 4; DB 6; Length 11;
  Query Match
                          100.0%; Pred. No. 6.3e+02;
  Best Local Similarity
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
            4; Conservative
                                 0; Mismatches
            7 KPRR 10
QУ
              \square
Db
            8 KPRR 11
```

```
RESULT 7
AAP50941
     AAP50941 standard; peptide; 11 AA.
ΙD
XX
AC
     AAP50941;
XX
     25-MAR-2003
DT
                  (revised)
DT
     06-OCT-1991
                  (first entry)
XX
     Hepatitis B virus (HBV) envelope protein pre-S gene peptide fragment.
DE
XX
KW
     Immunogen; vaccine; antigen; epitope; diagnosis.
XX
OS
     Hepatitis B virus.
XX
PN
     EP154902-A.
XX
     18-SEP-1985.
PD
XX
PF
     28-FEB-1985;
                    85EP-00102250.
XX
     07-MAR-1984;
                    84US-00587090.
PR
                    85US-00698499.
     05-FEB-1985;
PR
PR
     28-APR-1986;
                    86US-00856522.
XX
     (CALY ) CALIFORNIA INST OF TECHN.
PΑ
     (NYBL-) NEW YORK BLOOD CENTER INC.
PΑ
XX
     Neurath AR, Kent SBH;
PΙ
XX
     WPI; 1985-237979/39.
DR
XX
PT
     Pre-s gene coded hepatitis B immunogens - useful in in vaccines for
     protection and as diagnostics for detection of antigens and antigens.
PT
XX
PS
     Claim 30; Page 101; 140pp; English.
XX
     The peptides of the invention are immunogens which, esp. when linked to
CC
CC
     carriers, may be used in vaccines for conferring protection against HBV,
     and in the diagnosis of viral conditions in man and animals and in the
CC
     detection of the antigens and antibodies. More specifically, the chain of
CC
     AAs is between sequence posn. pre-S 120-174. (Updated on 25-MAR-2003 to
CC
     correct PA field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                              0;
             3; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
            7 KPR 9
Qу
              7 KPR 9
```

```
AAP50942
     AAP50942 standard; peptide; 11 AA.
ID
XX
     AAP50942;
AC
XX
DT
     25-MAR-2003
                  (revised)
     06-OCT-1991
DT
                  (first entry)
XX
     Hepatitis B virus (HBV) envelope protein pre-S gene peptide fragment.
DE
XX
ΚW
     Immunogen; vaccine; antigen; epitope; diagnosis.
XX
OS
     Hepatitis B virus.
XX
PN
     EP154902-A.
XX
     18-SEP-1985.
PD
XX
                    85EP-00102250.
PF
     28-FEB-1985;
XX
     07-MAR-1984;
                    84US-00587090.
PR
     05-FEB-1985;
                    85US-00698499.
PR
                    86US-00856522.
     28-APR-1986;
PR
XX
     (CALY ) CALIFORNIA INST OF TECHN.
PA
     (NYBL-) NEW YORK BLOOD CENTER INC.
PΑ
XX
     Neurath AR, Kent SBH;
PΙ
XX
     WPI; 1985-237979/39.
DR
XX
     Pre-s gene coded hepatitis B immunogens - useful in in vaccines for
PT
PT
     protection and as diagnostics for detection of antigens and antigens.
XX
PS
     Claim 31; Page 101; 140pp; English.
XX
CC
     The peptides of the invention are immunogens which, esp. when linked to
CC
     carriers, may be used in vaccines for conferring protection against HBV,
     and in the diagnosis of viral conditions in man and animals and in the
CC
     detection of the antigens and antibodies. More specifically, the chain of
CC
     AAs is between sequence posn. pre-S 120-174. (Updated on 25-MAR-2003 to
CC
CC
     correct PA field.)
XX
     Sequence 11 AA;
SQ
  Query Match
                          27.3%; Score 3; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
                                                                  0; Gaps
                               0; Mismatches
                                                                              0;
 Matches
            3; Conservative
                                                    0; Indels
Qy
            7 KPR 9
              III
Db
            7 KPR 9
RESULT 9
AAR05292
```

AAR05292 standard; protein; 11 AA.

```
XX
AC
    AAR05292;
XX
     25-MAR-2003
                  (revised)
DT
DT
     03-AUG-1990
                  (first entry)
XX
     Amino acid sequence encoded by modified portion of new synthetic human
DΕ
     lymphotoxin (HL) gene.
DΕ
XX
KW
     Synthetic human lymphotoxin (HL) gene.
XX
     Homo sapiens.
OS
XX
     JP02000447-A.
PN
XX
     05-JAN-1990.
PD
XX
     13-NOV-1987;
                    87JP-00287035.
PF
XX
     27-OCT-1987;
                    87JP-00271513.
PR
XX
     (SANY ) SANKYO CO LTD.
PΑ
XX
     WPI; 1990-047988/07.
DR
DR
     N-PSDB; AAQ93388, AAQ93372.
XX
РΤ
     Human lymphotoxin synthetic gene - is altered to leave only one side of
PT
     restriction enzyme recognition site, etc.
XX
PS
     Disclosure; Fig 4; 13pp; Japanese.
XX
CC
     It is the amino acid sequence of a modified portion of the new synthetic
CC
     human lymphotoxin gene. The gene has been engineered so that
CC
     modifications such as those carried out on its DNA are easier to produce.
CC
     (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to
CC
     correct PR field.) (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                               0; Mismatches
                                                                  0; Gaps
                                                                               0;
 Matches
             3; Conservative
                                                    0;
                                                        Indels
            1 ARQ 3
Qу
              111
            1 ARQ 3
RESULT 10
AAR14095
     AAR14095 standard; protein; 11 AA.
ID
XX
AC
    AAR14095;
XX
DT
     25-MAR-2003
                  (revised)
DT
     04-DEC-1991
                  (first entry)
XX
```

```
Pre-S(1-11) immunogenic peptide based on HBV subtype adr.
DE
XX
     hepatitis B virus; vaccine; liposome-peptide complex.
KW
XX
OS
     Synthetic.
XX
PN
     EP448126-A.
XX
     25-SEP-1991.
PD
XX
                    91EP-00105948.
ΡF
     28-FEB-1985;
XX
     07-MAR-1984;
                    84US-00587090.
PR
     05-FEB-1985;
                    85US-00698499.
PR
XX
PΑ
     (NYBL-) NEW YORK BLOOD CENTER INC.
     (CALY ) CALIFORNIA INST OF TECHN.
PΑ
XX
PΙ
     Neurath AR, Kent SBH;
XX
     WPI; 1991-283144/39.
DR
XX
     Synthetic lipid vesicle carrier linked to pre-S gene coded peptide - the
PT
     peptide is a hepatitis B immunogen, vaccine or diagnostic.
PT
XX
     Disclosure; Page 13; 54pp; English.
PS
XX
     This peptide is one of ten preferred HBV antigenic sequences which are
CC
     suitable for attachment to lipid vesicles for use as vaccines. The lipid
CC
     vesicle carrier is stabilised by cross-linking and has covalently bonded
CC
     sites on its outer surface to bind the peptide. See also AAR14086-R14094.
CC
     (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to
CC
CC
     correct PA field.)
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2;
                                                    Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
                                                                               0;
  Matches
            3; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
            7 KPR 9
Qу
              \perp
            7 KPR 9
Db
RESULT 11
AAR14094
     AAR14094 standard; protein; 11 AA.
XX
AC
     AAR14094;
XX
     25-MAR-2003
DT
                  (revised)
DT
     04-DEC-1991
                  (first entry)
XX
DE
     Pre-S(1-11) immunogenic peptide based on HBV subtype adw2.
XX
     hepatitis B virus; vaccine; liposome-peptide complex.
KW
```

```
XX
     Synthetic.
OS
XX
     EP448126-A.
PN
XX
     25-SEP-1991.
PD
XX
     28-FEB-1985;
                    91EP-00105948.
PF
XX
PR
     07-MAR-1984;
                    84US-00587090.
     05-FEB-1985;
                    85US-00698499.
PR
XX
PΑ
     (NYBL-) NEW YORK BLOOD CENTER INC.
PΑ
     (CALY ) CALIFORNIA INST OF TECHN.
XX
     Neurath AR,
                  Kent SBH;
PI
XX
     WPI; 1991-283144/39.
DR
XX
     Synthetic lipid vesicle carrier linked to pre-S gene coded peptide - the
PT
PT
     peptide is a hepatitis B immunogen, vaccine or diagnostic.
XX
     Disclosure; Page 13; 54pp; English.
PS
XX
     This peptide is one of ten preferred HBV antigenic sequences which are
CC
     suitable for attachment to lipid vesicles for use as vaccines. The lipid
CC
     vesicle carrier is stabilised by cross-linking and has covalently bonded
CC
     sites on its outer surface to bind the peptide. See AAR14086-R14095.
CC
     (Updated on 25-MAR-2003 to correct PF field.) (Updated on 25-MAR-2003 to
CC
CC
     correct PA field.)
XX
     Sequence 11 AA;
SO
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
  Matches
             3; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
Qу
            7 KPR 9
              111
Db
            7 KPR 9
RESULT 12
AAR24065
     AAR24065 standard; protein; 11 AA.
ΙD
XX
АÇ
     AAR24065;
XX
DT
     25-MAR-2003
                  (revised)
DT
     27-NOV-1992
                  (first entry)
XX
DΕ
     Cell-to-cell binding inhibiting peptide subunit (4).
XX
KW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
```

```
Key
                     Location/Qualifiers
FH
FT
     Cross-links
                     4. .11
                     /note= "sequence linked by interchain disulfide bonds
FΨ
                     with Cys residue on Arg3-Cys-Arg2-Ser-Arg-Gly-Asp-Val"
FT
XX
     WO9208476-A1.
PN
XX
PD
     29-MAY-1992.
XX
PF
     07-NOV-1991;
                    91WO-US008328.
XX
PR
     07-NOV-1990;
                    90US-00610363.
XX
     (SCRI ) SCRIPPS RES INST.
PΑ
XX
PΙ
     Ruggeri ZM, Houghten RA;
XX
     WPI; 1992-199940/24.
DR
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
PΤ
     integrins - for treating and preventing thrombus formation and diseases
     associated with platelet aggregation.
PT
XX
PS
     Claim 67; Page 69; 70pp; English.
XX
CC
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins may comprise two subunits having the sequence below, held
     together by an interchain stable bond. The sequence RGD is in each of the
CC
     subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
             3; Conservative
                                  0; Mismatches
                                                    0;
                                                        Indels
                                                                   0; Gaps
                                                                               0;
Qу
            9 RRS 11
              5 RRS 7
RESULT 13
AAR28129
     AAR28129 standard; protein; 11 AA.
ID
XX
AC
     AAR28129;
XX
DT
     25-MAR-2003
                  (revised)
DΤ
     27-NOV-1992
                  (first entry)
XX
     Cell-to-cell binding inhibiting peptide subunit (17).
DE
XX
ΚW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
FH
     Key
                     Location/Qualifiers
```

```
Cross-links
                     4. .11
FT
                     /note= "sequence linked by interchain amide bond at Lys
FT
                     position to Glu residue on Arg3-Glu-Arg2-Ser-Arg-Gly-Asp-
FΤ
                     Val sequence (see AAR28128)"
FT
XX
PN
     WO9208476-A1.
XX
PD
     29-MAY-1992.
XX
PF
     07-NOV-1991;
                    91WO-US008328.
XX
     07-NOV-1990;
                    90US-00610363.
PR
XX
     (SCRI ) SCRIPPS RES INST.
PA
XX
PI
     Ruggeri ZM, Houghten RA;
XX
DR
     WPI; 1992-199940/24.
XX
PT
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
     integrins - for treating and preventing thrombus formation and diseases
PT
     associated with platelet aggregation.
XX
PS
     Disclosure; Page 40-41; 70pp; English.
XX
CC
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequences given in AAR28128-
CC
     29, held together by an interchain stable bond. The sequence RGD is in
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
XX
SO
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
 Best Local Similarity 100.0%; Pred. No. 8.3e+03;
             3; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
Qy ·
            9 RRS 11
              5 RRS 7
RESULT 14
AAR28133
ID
     AAR28133 standard; protein; 11 AA.
XX
     AAR28133;
AC
XX
     25-MAR-2003
DT
                  (revised)
DT
     27-NOV-1992
                  (first entry)
XX
DΕ
     Cell-to-cell binding inhibiting peptide subunit (21).
XX
KW
    Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
                    Location/Qualifiers
FH
     Key
```

```
FT
     Cross-links
                     2. .11
                     /note= "sequence linked by interchain amide bond at Lys
FT
                     position to Glu residue on Arg-Glu-Arg4-Ser-Arg-Gly-Asp-
FT
                     Val sequence (see AAR28132)"
FT
XX
PN
     WO9208476-A1.
XX
PD
     29-MAY-1992.
XX
     07-NOV-1991;
                    91WO-US008328.
PF
XX
PR
     07-NOV-1990;
                    90US-00610363.
XX
     (SCRI ) SCRIPPS RES INST.
PΑ
XX
PΙ
     Ruggeri ZM, Houghten RA;
XX
    WPI; 1992-199940/24.
DR
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
PT
     integrins - for treating and preventing thrombus formation and diseases
PT
     associated with platelet aggregation.
XX
     Disclosure; Page 43-44; 70pp; English.
PS
XX
    A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequences given in AAR28132-
CC
     33, held together by an interchain stable bond. The sequence RGD is in
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
 Matches
            3; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
            9 RRS 11
Qy
              111
Db
            5 RRS 7
RESULT 15
AAR24066
    AAR24066 standard; protein; 11 AA.
ID
XX
AC
    AAR24066;
XX
DT
     25-MAR-2003
                  (revised)
DT
     27-NOV-1992
                  (first entry)
XX
    Cell-to-cell binding inhibiting peptide subunit (5).
DΕ
XX
KW
    Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
FH
     Key
                     Location/Qualifiers
```

```
Cross-links
                     3. .11
FT
                     /note= "multimers of sequence linked by interchain
FT
                     disulfide bonds with Cys residues"
FT
XX
ΡN
     WO9208476-A1.
XX
     29-MAY-1992.
PD
XX
                    91WO-US008328.
PF
     07-NOV-1991;
XX
     07-NOV-1990;
                    90US-00610363.
PR
XX
     (SCRI ) SCRIPPS RES INST.
PΑ
XX
PΙ
     Ruggeri ZM, Houghten RA;
XX
     WPI; 1992-199940/24.
DR
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
     integrins - for treating and preventing thrombus formation and diseases
PT
     associated with platelet aggregation.
PT
XX
     Claim 67; Page 69; 70pp; English.
PS
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins may comprise two subunits having the sequence below, held
CC
     together by an interchain stable bond. The sequence RGD is in each of the
CC
     subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
  Matches
             3; Conservative
                               0; Mismatches 0; Indels
                                                                  0; Gaps
                                                                              0;
            9 RRS 11
Qу
              111
Db
            5 RRS 7
RESULT 16
AAR28134
ID
     AAR28134 standard; protein; 11 AA.
XX
AC
     AAR28134;
XX
DΤ
     25-MAR-2003
                  (revised)
     27-NOV-1992
DT
                 (first entry)
XX
DE
     Cell-to-cell binding inhibiting peptide subunit (22).
XX
     Adhesion; integrin; multimer.
KW
XX
OS
     Synthetic.
XX
FH
                     Location/Qualifiers
FT
     Cross-links
                     1. .11
```

```
/note= "sequence linked by interchain amide bond at Glu
FT
                     position to Lys residue on Lys-Arg5-Ser-Arg-Gly-Asp-Val
FT
                     sequence (see AAR28135)"
FT
XX
PN
    WO9208476-A1.
XX
PD
    29-MAY-1992.
XX
     07-NOV-1991;
                    91WO-US008328.
ΡF
XX
     07-NOV-1990;
                    90US-00610363.
PR
XX
     (SCRI ) SCRIPPS RES INST.
PΑ
XX
PI
     Ruggeri ZM, Houghten RA;
XX
    WPI; 1992-199940/24.
DR
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
     integrins - for treating and preventing thrombus formation and diseases
PT
PT
     associated with platelet aggregation.
XX
     Disclosure; Page 44-45; 70pp; English.
PS
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequences given in AAR28134-
CC
     35, held together by an interchain stable bond. The sequence RGD is in
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
     Sequence 11 AA;
SQ
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
  Matches
             3; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                      Gaps
                                                                               0;
            9 RRS 11
Qу
              111
            5 RRS 7
Db
RESULT 17
AAR28271
     AAR28271 standard; protein; 11 AA.
ID
XX
AC
     AAR28271;
XX
DT
     25-MAR-2003
                  (revised)
     27-NOV-1992
                  (first entry)
DT
XX
     Cell-to-cell binding inhibiting peptide subunit (39).
DE
XX
KW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
FH
     Key
                     Location/Qualifiers
FT
     Cross-links
                     11
```

```
/note= "sequence linked by interchain amide bond at X=ORN
FT
                     to Glu residue on Arg3-Cys-Arg2-Ser-Arg-Gly-Asp-Glu
FT
                     sequence (see AAR28271)"
FT
                     11
     Modified-site
FT
                     /label= ORN
FT
XX
     WO9208476-A1.
PN
XX
     29-MAY-1992.
PD
XX
                    91WO-US008328.
PF
     07-NOV-1991;
XX
     07-NOV-1990;
                    90US-00610363.
PR
XX
     (SCRI ) SCRIPPS RES INST.
PA
XX
PΙ
     Ruggeri ZM, Houghten RA;
XX
     WPI; 1992-199940/24.
DR
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
     integrins - for treating and preventing thrombus formation and diseases
PT
     associated with platelet aggregation.
PT
XX
PS
     Disclosure; Page 61-62; 70pp; English.
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequences given in AAR28270-
CC
     71, held together by an interchain stable bond. The sequence RGD is in
CC
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
  Matches '
             3; Conservative
                               0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
Qу
            9 RRS 11
              III
            5 RRS 7
Db
RESULT 18
AAR24067
ID
     AAR24067 standard; protein; 11 AA.
XX
AC
     AAR24067;
XX
DT
     25-MAR-2003
                  (revised)
DT
     27-NOV-1992
                  (first entry)
XX
     Cell-to-cell binding inhibiting peptide subunit (6).
DE
XX
KW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
```

```
Location/Qualifiers
FH
     Key
FT
     Cross-links
                     2. .11
                     /note= "multimers of sequence linked by interchain
FT
                     disulfide bonds with Cys residues"
FT
XX
PN
     WO9208476-A1.
XX
     29-MAY-1992.
ΡD
XX
PF
     07-NOV-1991;
                    91WO-US008328.
XX
     07-NOV-1990;
                    90US-00610363.
PR
XX
     (SCRI ) SCRIPPS RES INST.
PΑ
XX
     Ruggeri ZM, Houghten RA;
PΙ
XX
     WPI; 1992-199940/24.
DR
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
     integrins - for treating and preventing thrombus formation and diseases
PΤ
     associated with platelet aggregation.
PT
XX
PS
     Claim 67; Page 69; 70pp; English.
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins may comprise two subunits having the sequence below, held
CC
     together by an interchain stable bond. The sequence RGD is in each of the
CC
     subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SO
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
 Matches
             3; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
            9 RRS 11
Qу
              111
            5 RRS 7
Db
RESULT 19
AAR28270
     AAR28270 standard; protein; 11 AA.
ΙD
XX
AC
     AAR28270;
XX
DT
     25-MAR-2003
                  (revised)
DΤ
     27-NOV-1992
                  (first entry)
XX
     Cell-to-cell binding inhibiting peptide subunit (38).
DE
XX
KW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
FH
     Key
                     Location/Qualifiers
```

```
FT
     Cross-links
                     11. .11
                     /note= "sequence linked by interchain amide bond at Glu
FT
                     position to Orn residue on Arg3-Cys-Arg2-Ser-Arg-Gly-Asp-
FT
                     Orn sequence (see AAR28271)"
FT
XX
     WO9208476-A1.
PN
XX
     29-MAY-1992.
PD
XX .
                    91WO-US008328.
ΡF
     07-NOV-1991;
XX
     07-NOV-1990;
                    90US-00610363.
PR
XX
     (SCRI ) SCRIPPS RES INST.
PΑ
XX
PΙ
     Ruggeri ZM, Houghten RA;
XX
     WPI; 1992-199940/24.
DR
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
     integrins - for treating and preventing thrombus formation and diseases
PT
     associated with platelet aggregation.
PT
XX
     Disclosure; Page 61-62; 70pp; English.
PS
XX
CC
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequences given in AAR28270-
     71, held together by an interchain stable bond. The sequence RGD is in
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
             3; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
            9 RRS 11
              IIII
            5 RRS 7
RESULT 20
AAR28128
     AAR28128 standard; protein; 11 AA.
ΙD
XX
AC
     AAR28128;
XX
DT
     25-MAR-2003 (revised)
DT
     27-NOV-1992
                  (first entry)
XX
     Cell-to-cell binding inhibiting peptide subunit (16).
DE
XX
     Adhesion; integrin; multimer.
KW
XX
OS
     Synthetic.
XX
FH
     Key
                    Location/Qualifiers
```

```
Cross-links
                     4. .11
FT
                     /note= "sequence linked by interchain amide bond at Glu
FT
                     position to Lys residue on Arg3-Lys-Arg2-Ser-Arg-Gly-Asp-
FT
                     Val sequence (see AAR28129)"
FT
XX
PN
     WO9208476-A1.
XX
PD
     29-MAY-1992.
XX
     07-NOV-1991;
                    91WO-US008328.
PF
XX
                    90US-00610363.
PR
     07-NOV-1990;
XX
     (SCRI ) SCRIPPS RES INST.
PA
XX
PI
     Ruggeri ZM, Houghten RA;
XX
DR
     WPI; 1992-199940/24.
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
PT
     integrins - for treating and preventing thrombus formation and diseases
     associated with platelet aggregation.
PT
XX
     Disclosure; Page 40-41; 70pp; English.
PS
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequences given in AAR28128-
CC
     29, held together by an interchain stable bond. The sequence RGD is in
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
  Matches
             3; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
            9 RRS 11
Qу
              \mathbf{I}
            5 RRS 7
Db
RESULT 21
AAR28135
     AAR28135 standard; protein; 11 AA.
XX
AC
     AAR28135;
XX
     25-MAR-2003 (revised)
DT
DT
     27-NOV-1992
                  (first entry)
XX
     Cell-to-cell binding inhibiting peptide subunit (23).
DE
XX
KW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
FH
     Key
                    Location/Qualifiers
```

```
Cross-links
                     1. .11
FT
                     /note= "sequence linked by interchain amide bond at Lys
FT
                     position to Glu residue on Glu-Arg5-Ser-Arg-Gly-Asp-Val
FT
                     sequence (see AAR28133)"
FT
XX
     WO9208476-A1.
PN
XX
     29-MAY-1992.
PD
XX
                    91WO-US008328.
     07-NOV-1991;
PF
XX
     07-NOV-1990;
                    90US-00610363.
PR
XX
     (SCRI ) SCRIPPS RES INST.
PΑ
XX
     Ruggeri ZM, Houghten RA;
PΙ
XX
     WPI; 1992-199940/24.
DR
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
     integrins - for treating and preventing thrombus formation and diseases
PT
     associated with platelet aggregation.
PT
XX
PS
     Disclosure; Page 44-45; 70pp; English.
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequences given in AAR28134-
CC
     35, held together by an interchain stable bond. The sequence RGD is in
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
  Matches
             3; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                0; Gaps
                                                                               0;
            9 RRS 11
Qу
              111
Db
            5 RRS 7
RESULT 22
AAR28130
     AAR28130 standard; protein; 11 AA.
ID
XX
AC
     AAR28130;
XX
DT
     25-MAR-2003
                  (revised)
DT
     27-NOV-1992
                  (first entry)
XX
     Cell-to-cell binding inhibiting peptide subunit (18).
DE
XX
KW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
FΗ
     Key
                     Location/Qualifiers
```

```
3. .11
FT
     Cross-links
                     /note= "sequence linked by interchain amide bond at Glu
FT
                     position to Lys residue on Arg2-Lys-Arg3-Ser-Arg-Gly-Asp-
FT
                     Val sequence (see AAR28131)"
FT
XX
PN
    WO9208476-A1.
XX
PD
     29-MAY-1992.
XX
     07-NOV-1991;
                    91WO-US008328.
PF
XX
     07-NOV-1990;
                    90US-00610363.
PR
XX
     (SCRI ) SCRIPPS RES INST.
PΑ
XX
PI
     Ruggeri ZM, Houghten RA;
XX
DR
     WPI; 1992-199940/24.
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
     integrins - for treating and preventing thrombus formation and diseases
PT
     associated with platelet aggregation.
PT
XX
PS
     Disclosure; Page 41-43; 70pp; English.
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequences given in AAR28130-
CC
     31, held together by an interchain stable bond. The sequence RGD is in
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
                                                   0; Indels
            3; Conservative
                               0; Mismatches
                                                                  0; Gaps
                                                                              0;
            9 RRS 11
Qу
              +11
            5 RRS 7
Db
RESULT 23
AAR24068
     AAR24068 standard; protein; 11 AA.
XX
AC
     AAR24068;
XX
                  (revised)
DT
     25-MAR-2003
DT
     27-NOV-1992
                 (first entry)
XX
     Cell-to-cell binding inhibiting peptide subunit (7).
DE
XX
KW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
FΉ
     Key
            .
                    Location/Qualifiers
```

```
Cross-links
                      1. .11
FT
                      /note= "multimers of sequence linked by interchain
FT
                      disulfide bonds with Cys residues"
FT
XX
PN
     WO9208476-A1.
XX
PD
     29-MAY-1992.
XX
     07-NOV-1991;
                    91WO-US008328.
ΡF
XX
                    90US-00610363.
     07-NOV-1990;
PR
XX
     (SCRI ) SCRIPPS RES INST.
PA
XX
PI
     Ruggeri ZM, Houghten RA;
XX
     WPI; 1992-199940/24.
DR
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
PT
     integrins - for treating and preventing thrombus formation and diseases
PT
PT
     associated with platelet aggregation.
XX
     Claim 67; Page 70; 70pp; English.
PS
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequence below, held together
CC
     by an interchain stable bond. The sequence RGD is in each of the
CC
     subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
                           27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
  Matches
             3; Conservative
                                0; Mismatches 0; Indels
                                                                    0; Gaps
                                                                                 0;
            9 RRS 11
Qу
              \parallel \parallel \parallel \parallel
Db
            5 RRS 7
RESULT 24
AAR28131
     AAR28131 standard; protein; 11 AA.
ID
XX
AC
     AAR28131;
XX
     25-MAR-2003
DT
                   (revised)
     27-NOV-1992
                   (first entry)
DT
XX
     Cell-to-cell binding inhibiting peptide subunit (19).
DE
XX
KW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
FH
     Key
                      Location/Qualifiers
FT
     Cross-links
                      3. .11
```

```
/note= "sequence linked by interchain amide bond at Lys
FT
                     position to Glu residue on Arg2-Glu-Arg3-Ser-Arg-Gly-Asp-
FT
                     Val seguence (see AAR28130)"
FT
XX
     WO9208476-A1.
PN
XX
     29-MAY-1992.
PD
XX
     07-NOV-1991;
                    91WO-US008328.
PF
XX
                    90US-00610363.
     07-NOV-1990;
PR
XX
     (SCRI ) SCRIPPS RES INST.
PΑ
XX
     Ruggeri ZM, Houghten RA;
PΙ
XX
DR
     WPI; 1992-199940/24.
XX
     Peptides inhibiting binding of adhesion mols. to cells expressing
РT
     integrins - for treating and preventing thrombus formation and diseases
PT
PT
     associated with platelet aggregation.
XX
     Disclosure; Page 41-43; 70pp; English.
PS
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
     integrins comprises two subunits having the sequences given in AAR28130-
CC
     31, held together by an interchain stable bond. The sequence RGD is in
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
     Sequence 11 AA;
SO
  Query Match
                           27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
  Matches
             3; Conservative
                               0; Mismatches
                                                     0; Indels
                                                                    0; Gaps
                                                                                0;
            9 RRS 11
Qу
              \mathbf{1} \mathbf{1} \mathbf{1}
Db
            5 RRS 7
RESULT 25
AAR28132
     AAR28132 standard; protein; 11 AA.
XX
AC
     AAR28132;
XX
     25-MAR-2003
                   (revised)
DΤ
     27-NOV-1992
                   (first entry)
DT
XX
     Cell-to-cell binding inhibiting peptide subunit (20).
DE
XX
KW
     Adhesion; integrin; multimer.
XX
OS
     Synthetic.
XX
FH
     Key
                      Location/Qualifiers
FT
     Cross-links
                     2. .11
```

```
/note= "sequence linked by interchain amide bond at Glu
FT
                     position to Lys residue on Arg-Lys-Arg4-Ser-Arg-Gly-Asp-
FΤ
                     Val sequence (see AAR28133)"
FΤ
XX
    WO9208476-A1.
PN
XX
    29-MAY-1992.
PD
XX
PF
     07-NOV-1991;
                    91WO-US008328.
XX
                    90US-00610363.
PR
     07-NOV-1990;
XX
PΑ
     (SCRI ) SCRIPPS RES INST.
XX
PΙ
     Ruggeri ZM, Houghten RA;
XX
DR
    WPI; 1992-199940/24.
XX
PT
     Peptides inhibiting binding of adhesion mols. to cells expressing
     integrins - for treating and preventing thrombus formation and diseases
PT
PT
     associated with platelet aggregation.
XX
PS
     Disclosure; Page 43-44; 70pp; English.
XX
     A peptide which inhibits binding of adhesion mols. to cells expressing
CC
CC
     integrins comprises two subunits having the sequences given in AAR28132-
     33, held together by an interchain stable bond. The sequence RGD is in
CC
CC
     each of the subunits. (Updated on 25-MAR-2003 to correct PN field.)
XX
     Sequence 11 AA;
SQ
 Query Match
                          27.3%; Score 3; DB 2; Length 11;
 Best Local Similarity 100.0%; Pred. No. 8.3e+03;
 Matches
             3; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                  0;
                                                                      Gaps
                                                                               0;
            9 RRS 11
Qу
              | | | |
Db
            5 RRS 7
RESULT 26
AAR44847
    AAR44847 standard; peptide; 11 AA.
XX
AC
    AAR44847;
XX
DT
     25-MAR-2003
                  (revised)
DT
     09-JAN-2003
                  (revised)
     31-JAN-1994
                  (first entry)
DT
XX
     Lactoferrin-related antibacterial peptide.
DE
XX
KW
     Lactoferrin; antibiotic; chelate; mastitis; bowel disorder; disease;
     bacteria; yeast; funqi; disinfection; drug; foodstuff; cosmetic;
KW
KW
     toiletries.
XX
OS
    Unidentified.
```

```
XX
FH
                     Location/Qualifiers
     Disulfide-bond 10
FT
                     /note= "Cys10 forms disulfide bond with Cys35 of sequence
FT
FT
                     in AAR44846"
XX
    WO9314640-A1.
PN
XX
     05-AUG-1993.
PD
XX
     30-NOV-1992;
                    92WO-JP001563.
PF
XX
                    92JP-00032660.
PR
     23-JAN-1992;
                    92JP-00052943.
     11-MAR-1992;
PR
                    92JP-00262143.
     30-SEP-1992;
PR
PR
     30-SEP-1992;
                    92JP-00262559.
XX
     (MORG ) MORINAGA MILK IND CO LTD.
PA
XX
PΙ
     Tomita M. Shimamura S. Kawase K. Fukuwatari Y. Takase M;
     Bellamy W, Yamauchi K, Wakabayashi H, Tokita Y;
PΙ
XX
    WPI; 1993-258265/32.
DR
XX
     Antibacterial agent comprising decomposition products of lactoferrin -
РT
     with chelate e.g. EDTA alcohol and/or antibiotic e.g. penicillin, also
PT
     useful against yeast and fungi.
PT
XX
     Disclosure; Page 88; 100pp; Japanese.
PS
XX
     Lactoferrin-related peptides are used in new antibacterial compsn. The
CC
     compsn. is highly effective against a broad range of bacteria, yeasts and
CC
CC
     fungi. It can be used therapeutically (internal and external
CC
     application), e.g. for mastitis, bowel disorders, urinary infections,
     etc. It can also be used for the disinfection and protection of drugs,
CC
     foodstuffs, cosmetics and toiletries and household items (such as kitchen
CC
CC
     towels and toilet paper). (Updated on 09-JAN-2003 to add missing OS
CC
     field.) (Updated on 25-MAR-2003 to correct PN field.)
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                         100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                              0; Mismatches
                                                   0; Indels
                                                               0; Gaps
                                                                             0;
 Matches
            3; Conservative
Qу
            9 RRS 11
              +11
            4 RRS 6
Db
RESULT 27
AAR40877
     AAR40877 standard; protein; 11 AA.
XX
AC
    AAR40877;
XX
DТ
     24-OCT-2003 (revised)
```

```
25-MAR-2003
                  (revised)
DΤ
     28-MAR-1994 (first entry)
DT
XX
     SSP for flavonoid-3',5'-hydroxylase gene product.
DE
XX
     Flavonoid-3',5'-hydoxylase; transformation; plants; petunia; rose;
KW
     tobacco; pigment alteration; blue; SSP; single specific primer; PCR;
KW
     polymerase chain reaction; amplification; expression; ss.
KW
XX
     Petunia x hybrida.
OS
XX
     WO9318155-A1.
PN
XX
     16-SEP-1993.
PD
XX
     20-NOV-1992;
                    92WO-JP001520.
PF
XX
                    92JP-00044963.
     02-MAR-1992;
PR
XX
     (KYOW ) KYOWA HAKKO KOGYO CO LTD.
PΑ
XX
     Kikuchi Y, Kiyokawa S, Shimada Y, Ohbayashi M, Shimada R;
PI
PΙ
     Okinaka Y;
XX
     WPI; 1993-303469/38.
DR
     N-PSDB; AAQ47878.
DR
XX
     Gene coding for flavonoid-3',5'-hydroxylase of petunia petals - used to
PT
     transform plants e.g. petunia, rose or tobacco to give bluer flower
PT
PT
     colour and altered pigment pattern.
XX
PS
     Claim 11; Page 58; 82pp; Japanese.
XX
     Insertion of the sequences (AAQ47840-42) into plants such as rose,
CC
     petunia, tobacco and carnation, using a suitable vector such as
CC
     agrobacterium, give transformed plants which express the gene, resulting
CC
     in petals with a bluer colour than normal, and/or pigmentation patterns
CC
     which do not occur naturally. The sequences were amplified using primers
CC
     (AAQ47843-70). Related single specific primers using a gene sequence
CC
     coding for the haem-binding region of cytochrome P450 are shown in
CC
     (AAQ47871-Q47903). (Updated on 25-MAR-2003 to correct PN field.) (Updated
CC
     on 24-OCT-2003 to standardise OS field)
CC
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
                                                                  0; Gaps
                                                                              0;
             3; Conservative 0; Mismatches
                                                    0; Indels
  Matches
            8 PRR 10
Qу
              | \cdot |
            6 PRR 8
Db
```

RESULT 28
AAR40874
ID AAR40874 standard; protein; 11 AA.

```
XX
     AAR40874;
AC
XX
     24-OCT-2003
DT
                  (revised)
DT
     25-MAR-2003
                  (revised)
     28-MAR-1994
                  (first entry)
DT
XX
     SSP for flavonoid-3',5'-hydroxylase gene.
DE
XX
     Flavonoid-3',5'-hydoxylase; transformation; plants; petunia; rose;
KW
     tobacco; pigment alteration; blue; SSP; single specific primer; PCR;
KW
     polymerase chain reaction; amplification; expression; ss.
KW
XX
     Petunia x hybrida.
OS
XX
     WO9318155-A1.
PN
XX
     16-SEP-1993.
PD
XX
     20-NOV-1992;
                    92WO-JP001520.
PF
XX
                    92JP-00044963.
     02-MAR-1992;
PR
XX
     (KYOW ) KYOWA HAKKO KOGYO CO LTD.
PA
XX
                 Kiyokawa S, Shimada Y, Ohbayashi M,
PI
     Kikuchi Y,
PI
     Okinaka Y;
XX
     WPI; 1993-303469/38.
DR
DR
     N-PSDB; AAQ47875.
XX
     Gene coding for flavonoid-3',5'-hydroxylase of petunia petals - used to
PT
РΤ
     transform plants e.g. petunia, rose or tobacco to give bluer flower
PT
     colour and altered pigment pattern.
XX
PS
     Claim 11; Page 57; 82pp; Japanese.
XX
     Insertion of the sequences (AAQ47840-42) into plants such as rose,
CC
     petunia, tobacco and carnation, using a suitable vector such as
CC
     agrobacterium, give transformed plants which express the gene, resulting
CC
     in petals with a bluer colour than normal, and/or pigmentation patterns
CC
     which do not occur naturally. The sequences were amplified using primers
CC
     (AAQ47843-70). Related single specific primers using a gene sequence
CC
     coding for the haem-binding region of cytochrome P450 are shown in
CC
     (AAQ47871-Q47903). (Updated on 25-MAR-2003 to correct PN field.) (Updated
CC
CC
     on 24-OCT-2003 to standardise OS field)
XX
SO
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                 0; Mismatches
                                                                   0; Gaps
                                                                               0;
                                                       Indels
             3; Conservative
                                                    0;
            9 RRS 11
Qу
               | | |
Db
             6 RRS 8
```

```
RESULT 29
AAR40878
     AAR40878 standard; protein; 11 AA.
ID
XX
AC
     AAR40878;
XX
     24-OCT-2003
                  (revised)
DT
     25-MAR-2003
                  (revised)
DT
     28-MAR-1994
                  (first entry)
DT
XX
     SSP for flavonoid-3',5'-hydroxylase gene product.
DE
XX
     Flavonoid-3',5'-hydoxylase; transformation; plants; petunia; rose;
KW
     tobacco; pigment alteration; blue; SSP; single specific primer; PCR;
KW
     polymerase chain reaction; amplification; expression.
ΚW
XX
OS
     Petunia x hybrida.
XX
     WO9318155-A1.
PN
XX
     16-SEP-1993.
PD
XX
     20-NOV-1992;
                    92WO-JP001520.
PF
XX
                    92JP-00044963.
PR
     02-MAR-1992;
XX
     (KYOW ) KYOWA HAKKO KOGYO CO LTD.
PΑ
XX
                 Kiyokawa S, Shimada Y, Ohbayashi M,
PΙ
     Kikuchi Y,
     Okinaka Y;
PI
XX
DR
     WPI; 1993-303469/38.
DR
     N-PSDB; AAQ47879.
XX
     Gene coding for flavonoid-3',5'-hydroxylase of petunia petals - used to
PT
     transform plants e.g. petunia, rose or tobacco to give bluer flower
PT
PT
     colour and altered pigment pattern.
XX
     Claim 11; Page 58; 82pp; Japanese.
PS
XX
     Insertion of the sequences (AAQ47840-42) into plants such as rose,
CC
     petunia, tobacco and carnation, using a suitable vector such as
CC
     agrobacterium, give transformed plants which express the gene, resulting
CC
     in petals with a bluer colour than normal, and/or pigmentation patterns
CC
     which do not occur naturally. The sequences were amplified using primers
CC
     (AAQ47843-70). Related single specific primers using a gene sequence
CC
     coding for the haem-binding region of cytochrome P450 are shown in
CC
     (AAQ47871-Q47903). (Updated on 25-MAR-2003 to correct PN field.) (Updated
CC
     on 24-OCT-2003 to standardise OS field)
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                               0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0:
  Matches
             3; Conservative
```

```
\mathbf{I}
            6 RRS 8
Db
RESULT 30
AAR67084
     AAR67084 standard; peptide; 11 AA.
ID
XX
AC
     AAR67084;
XX
DT
     25-MAR-2003 (revised)
DT
     29-JUN-1995 (first entry)
XX
     Sweet peptide (SW-MB1) contg. proline brackets.
DE
XX
     Sweet peptide; non-nutrient sweetner; food; drink; dessert; candy;
KW
     interaction site; constrained conformation; reduce calorie intake;
KW
     sweet tasting papillae; diabetes; mimic; thaumatin; monellin; mabinlin.
KW
XX
     Synthetic.
OS
XX
     WO9425482-A1.
PN
XX
     10-NOV-1994.
PD
XX
     21-APR-1994;
                    94WO-US004294.
PF
XX
                    93US-00051741.
PR
     23-APR-1993;
     29-OCT-1993;
                    93US-00143364.
PR
XX
     (EVAN/) EVANS H J.
PA
PA
     (KINI/) KINI R M.
XX
PΙ
     Evans HJ, Kini RM;
XX
DR
     WPI; 1994-358186/44.
XX
     Peptide homologue or analogue with constrained conformation - has proline
PT
PT
     residues flanking the interaction site to impart greater, or more stable,
     biological activity.
PT
XX
PS
     Example 2; Page 32; 57pp; English.
XX
     AAR67077-88 are sweet peptides derived from naturally occuring
CC
     polypeptides that contain proline or proline/cysteine brackets. These
CC
     peptides are shortened to form fragments that contain one or more
CC
     interaction sites of interest. AAR67084-88 are deriv. from mabinlin. The
CC
     sweet peptides bind to receptors of sweet tasting papillae and induce a
CC
     sweet sensation. Typically, these peptides are 5000 to 10000 times
CC
     sweeter than sugar. In comparison, aspartame is only 160 times sweeter
CC
     than sugar. The peptides are useful as non-nutrient sweetners for food,
CC
     etc. and are helpful in normal and low calorie diets. They are esp.
CC
     suitable for people with diabetes. The data collected demonstrates that
CC
     interaction sites possess activity when present in a polypeptide that
CC
     differs from the native form. Inclusion of conformation-constraining
CC
     moieties can have desirable effects on an interaction site. (Also see
CC
```

9 RRS 11

Qу

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AAR67011-76 and AAR67089-152 for analogues of other biologically active
CC
     peptides contq. an interaction site flanked by conformation constraining
CC
     qps., eq. RGD peptides.) (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2;
                                                   Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                              0;
             3; Conservative
                              0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
            8 PRR 10
Qу
              III
Db
            2 PRR 4
RESULT 31
AAR71764
     AAR71764 standard; peptide; 11 AA.
ID
XX
     AAR71764;
AC
XX
     25-MAR-2003
                 (revised)
DT
DT
     15-MAY-1995
                 (first entry)
XX
     Neurotensin receptor fluorescent probe.
DE
XX
     Neurotensin; NT; receptor; probe; fluorescent.
KW
XX
OS
     Synthetic.
XX
FΉ
     Key
                     Location/Oualifiers
     Modified-site
FT
                     /note= "Tyr or D-Tyr; and this residue is N-acylated with
FT
                     fluorescent label. See CC below. Also this amino acid can
FT
                     be substituted by Lys or Orn."
FT
FT
     Modified-site
                     /label= Orn
FT
XX
     EP606804-A2.
PN
XX
PD
     20-JUL-1994.
XX
PF
     27-DEC-1993;
                    93EP-00403185.
XX
                    92CA-02086453.
PR
     30-DEC-1992;
XX
PA
     (UYMC-) UNIV MCGILL.
XX
     Beaudet A, Faure M,
PI
                           Gaudreau P;
XX
DR
     WPI; 1994-226757/28.
XX
     New forescent markers for neurotensin receptors - useful for in vitro
PT
     labelling of neurotensin receptors on cell surface and to isolate
PT
     neurotensin-receptor expressing cells.
PT
XX
PS
     Claim 2; Page 5; 19pp; English.
```

```
XX
     The invention concerns highly sensitive fluorescent probes which allow
CC
     for rapid and precise characterisation of neurotensin receptor binding
СC
     properties on whole cells. The probes are of formula R1-C(=X)-R in which
CC
     R1 is is a fluorophore chosen from fluorescein, rhodamine, Blue
CC
     fluorescent and Texas red; X is oxygen or sulphur; and R is a neurotensin
CC
     -type polypeptide sequence containing the core sequence Arg-Arg-Pro-Tyr-
CC
     Ile-Leu or Arg-Arg-Pro-Trp-Ile-Leu. Specific sequences are given in
CC
     AAR71745 - AAR71772. The R1-CX- acyl group is linked to the peptide via
CC
     the N-terminus in position 1. The N-terminal amino acid may also be
CC
     substd. by Lys or Orn. The present sequence represents one of the claimed
CC
     peptide sequences for R. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
             3; Conservative
                                0; Mismatches
            8 PRR 10
Qу
              111
            5 PRR 7
Db
RESULT 32
AAR71763
     AAR71763 standard; peptide; 11 AA.
XX
     AAR71763;
AC
XX
DT
     25-MAR-2003
                  (revised)
     15-MAY-1995
                  (first entry)
DT
XX
DE
     Neurotensin receptor fluorescent probe.
XX
KW
     Neurotensin; NT; receptor; probe; fluorescent.
XX
os
     Synthetic.
XX
                     Location/Qualifiers
FH
     Кеу
FT
     Modified-site
                     /note= "Tyr or D-Tyr; and this residue is N-acylated with
FT
                     fluorescent label. See CC below. Also this amino acid can
FT
                     be substituted by Lys or Orn."
FT
FT
     Modified-site
FT
                     /label= Orn
XX
     EP606804-A2.
PN
XX
PD
     20-JUL-1994.
XX
                    93EP-00403185.
PF
     27-DEC-1993;
XX
PR
     30-DEC-1992;
                    92CA-02086453.
XX
PA
     (UYMC-) UNIV MCGILL.
XX
```

```
XX
     WPI; 1994-226757/28.
DR
XX
     New forescent markers for neurotensin receptors - useful for in vitro
PT
     labelling of neurotensin receptors on cell surface and to isolate
PT
     neurotensin-receptor expressing cells.
PT
XX
     Claim 2; Page 5; 19pp; English.
PS
XX
     The invention concerns highly sensitive fluorescent probes which allow
CC
     for rapid and precise characterisation of neurotensin receptor binding
CC
     properties on whole cells. The probes are of formula R1-C(=X)-R in which
CC
     Rl is is a fluorophore chosen from fluorescein, rhodamine, Blue
CC
     fluorescent and Texas red; X is oxygen or sulphur; and R is a neurotensin
CC
     -type polypeptide sequence containing the core sequence Arg-Arg-Pro-Tyr-
CC
     Ile-Leu or Arg-Arg-Pro-Trp-Ile-Leu. Specific sequences are given in
CC
     AAR71745 - AAR71772. The R1-CX- acyl group is linked to the peptide via
CC
     the N-terminus in position 1. The N-terminal amino acid may also be
CC
     substd. by Lys or Orn. The present sequence represents one of the claimed
CC
     peptide sequences for R. (Updated on 25-MAR-2003 to correct PN field.)
CC
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                0; Mismatches
                                                   0; Indels
                                                                      Gaps
  Matches
             3; Conservative
            8 PRR 10
Qу
              111
            5 PRR 7
Db
RESULT 33
AAR52676
     AAR52676 standard; protein; 11 AA.
ID
XX
     AAR52676;
AC
XX
     27-AUG-2003
                  (revised)
DT
     25-MAR-2003
                  (revised)
DT
     09-AUG-1994
                  (first entry)
DT
XX
     Fragment encoded by homology vector used to inactivate herpesvirus.
DE
XX
     Equine herpesvirus; US2; vaccine; antigen; protection; prophylaxis;
KW
     prevention; vector.
KW
XX
     Unidentifed.
OS
XX
     WO9403628-A1.
PN
XX
     17-FEB-1994.
PD
XX
     06-AUG-1993;
                    93WO-US007424.
ΡF
XX
     07-AUG-1992;
                    92US-00926784.
PR
```

Gaudreau P;

Beaudet A, Faure M,

PI

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XX
     (SYTR ) SYNTRO CORP.
PΑ
XX
     Cochran MD;
PΙ
XX
    WPI; 1994-065715/08.
DR
    N-PSDB; AAQ56623.
DR
XX
    New recombinant equine herpes viruses - used to prepare vaccines to
PT
    protect horses from infectious equine herpes virus.
PT
XX
     Disclosure; Fig 7; 153pp; English.
PS
XX
     Recombinant equine herpesvirus' (EHV) have a foreign DNA sequence
CC
     inserted into their genomes. The inserted sequence is a piece of foreign,
CC
     double stranded DNA which encodes an RNA molecule which does not
CC
     naturally occur in the animal into which the EHV is introduced. The
CC
     foreign DNA sequence is introduced into the EHV via a homology vector.
CC
     The recombinant EHV's are used to prepare vaccines to protect horses from
CC
     infectious EHV. This sequence is encoded by a fragment of a homology
CC
     vector. A desired DNA fragment can be cloned into the homology vector.
CC
     (Updated on 25-MAR-2003 to correct PN field.) (Updated on 27-AUG-2003 to
CC
     correct OS field.)
CC
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%;
                                  Pred. No. 8.3e+03;
  Best Local Similarity
                                                        Indels
                                                                  0;
                                                                      Gaps
                                                                               0;
             3: Conservative
                                 0; Mismatches
                                                    0;
  Matches
            8 PRR 10
Qу
              4 PRR 6
Db
RESULT 34
AAR55785
     AAR55785 standard; peptide; 11 AA.
ID
XX
     AAR55785;
AC
XX
DT
     25-MAR-2003
                  (revised)
DT
     21-FEB-1995
                  (first entry)
XX
     Human cardiac troponin I N-terminal sequence (16-26).
DE
XX
     Human cardiac troponin I; heart muscle necrosis; immunogen; epitope;
KW
     immunodiagnosis; acute myocardial infarction.
KW
XX
OS
     Homo sapiens.
XX
PN
     DE4243648-A1.
XX
PD
     07-JUL-1994.
XX
PF
     23-DEC-1992;
                    92DE-04243648.
XX
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```
23-DEC-1992;
PR
                    92DE-04243648.
XX
     (BOEF ) BOEHRINGER MANNHEIM GMBH.
PΑ
XX
PI
     Lill H, Donie F, Borgya A, Seidel C;
XX
     WPI; 1994-218764/27.
DR
XX
     Rapid diagnosis of heart muscle necrosis in myocardial infarction - by
PT
     immunological test using new antibody recognising cardial troponin 1 \hat{N}-
PΤ
     terminal peptide.
PT
XX
     Claim 2; Page 10; 12pp; German.
PS
XX
     The N-terminal 30 amino acids of human cardiac troponin I (AAR55781) or
CC
     subfragments of it (AAR55782-R55788) can be used as immunogens. The
CC
     antibodies raised by immunising animals (pref. sheep) with the peptides
CC
     are useful for rapid diagnosis of heart muscle necrosis. (Updated on 25-
CC
     MAR-2003 to correct PN field.)
CC
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
             3; Conservative 0; Mismatches 0; Indels
                                                                  0;
                                                                      Gaps
                                                                              0;
  Matches
            9 RRS 11
Qу
              \perp
            6 RRS 8
RESULT 35
AAR55788
ΙD
     AAR55788 standard; peptide; 11 AA.
XX
AC
     AAR55788;
XX
DΤ
     25-MAR-2003
                  (revised)
DΤ
     21-FEB-1995
                  (first entry)
XX
     Human cardiac troponin I N-terminal sequence (16-26).
DE
XX
     Human cardiac troponin I; heart muscle necrosis; immunogen; epitope;
KW
     immunodiagnosis; acute myocardial infarction.
KW
XX
OS
     Homo sapiens.
XX
     DE4243648-A1.
PN
XX
PD
     07-JUL-1994.
XX
PF
     23-DEC-1992;
                    92DE-04243648.
XX
PR
     23-DEC-1992;
                    92DE-04243648.
XX
PA
     (BOEF ) BOEHRINGER MANNHEIM GMBH.
XX
```

```
Lill H, Donie F, Borgya A, Seidel C;
PΙ
XX
     WPI: 1994-218764/27.
DR
XX
     Rapid diagnosis of heart muscle necrosis in myocardial infarction - by
PT
     immunological test using new antibody recognising cardial troponin 1 N-
PT
     terminal peptide.
PT
XX
     Claim 2; Page 11; 12pp; German.
PS
XX
     The N-terminal 30 amino acids of human cardiac troponin I (AAR55781) or
CC
     subfragments of it (AAR55782-R55788) can be used as immunogens. The
CC
     antibodies raised by immunising animals (pref. sheep) with the peptides
CC
     are useful for rapid diagnosis of heart muscle necrosis. (Updated on 25-
CC
     MAR-2003 to correct PN field.)
CC
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
                                                 0; Indels
                                                                              0;
            3; Conservative
                              0; Mismatches
                                                                 0; Gaps
  Matches
            9 RRS 11
Qу
              111
            6 RRS 8
Db
RESULT 36
AAR84118
     AAR84118 standard; peptide; 11 AA.
ΙD
XX
     AAR84118;
AC
XX
DT
     22-MAR-1996 (first entry)
XX
DE
     Equine herpesvirus (EHV4) glycoprotein H residues 288-298.
XX
KW
     Equine herpesvirus 4; EHV4; recombinant; vaccine; attenuated virus;
     diagnosis; plasmid 495-61.39; junction C; glycoprotein H.
KW
XX
OS
     Synthetic.
XX
     WO9522607-A1.
PN
XX
PD
     24-AUG-1995.
XX
                    95WO-US002087.
PF
     16-FEB-1995;
XX
PR
     17-FEB-1994;
                    94US-00198094.
XX
PA
     (SYTR ) SYNTRO CORP.
XX
PΙ
     Cochran MD, Chiang CH;
XX
     WPI; 1995-302714/39.
DR
DR
     N-PSDB; AAT00545.
XX
```

```
Recombinant equine herpes viruses pref. contg. a deletion in a region not
PT
     essential for replication - used in vaccines to protect horses from
PT
PT
     infection.
XX
     Example 5; Fig 7; 159pp; English.
PS
XX
     AAR84118 is encoded by the equine herpesvirus 4 (EHV) plasmid 495-61.39
CC
     junction C. The plasmid was used in the construction of a recombinant
CC
CC
     attenuated EHV. The attenuated virus can be used as a foetal safe vaccine
     to protect an equine against EHV, or in a test to determine if an equine
CC
     has been vaccinated against or is infected with EHV
CC
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
            3; Conservative 0; Mismatches 0; Indels
                                                                  0; Gaps
                                                                              0;
            8 PRR 10
Qу
              111
Db
            4 PRR 6
RESULT 37
AAR79902
     AAR79902 standard; peptide; 11 AA.
ID
XX
AC
    AAR79902;
XX
DT
     19-MAR-1996 (first entry)
XX
DΕ
     Human FK-506 cytosolic binding protein FKBP12 residues 38-48.
XX
KW
     Human; cytosolic binding protein; FKBP12; residues 38-48; FK-506;
     diagnosis; purification; determination; detection; immunosuppressant;
KW
KW
     binding partner; antibodies.
XX
OS
     Homo sapiens.
XX
PN
     W09521861-A1.
XX
PD
     17-AUG-1995.
XX
     10-FEB-1995;
                    95WO-US001721.
PF
XX
                    94US-00197795.
PR
     15-FEB-1994;
XX
     (MERI ) MERCK & CO INC.
PA
XX
PΙ
     Wiederrecht GJ, Sewell TJ;
XX
     WPI; 1995-293076/38.
DR
XX
     New FK-506 cytosolic binding protein - used for diagnostic, purification
PT
     or investigational procedures, partic. for detection of FK-506.
PΤ
XX
PS
     Disclosure; Page 9; 68pp; English.
```

```
AAR79900-R79902 are peptides from the human FK-506 immunosuppressant
CC
     cytosolic binding protein FKBP12. The peptides were conjugated to
ÇС
     thyroglobulin, and used to generate anti-peptide antibodies. The
CC
     antibodies were used to survey tissue and cell extracts relevent to the
CC
     immunosuppressive effects FK-506. FKBP12 can be used as a specific
CC
     binding partner for a variety of ligands for diagnostic, purifcn. and
CC
     investigatory procedures. It can also be used to determine the presence
CC
     or quantity of FK-506 in a sample, e.g. a body fluid from an
CC
     immunosuppressed individual on FK-506 therapy
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
             3; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                   0; Gaps 0;
            2 RQK 4
Qy
              \parallel \parallel \parallel \parallel
            5 ROK 7
Db
RESULT 38
AAW21352
     AAW21352 standard; peptide; 11 AA.
ID
XX
AC
     AAW21352;
XX
                  (first entry)
DT
     29-JUL-1997
XX
     Gastrin precursor derived signal oligopeptide #10.
DE
XX
     Hydrophilic; signal oligopeptide; hydrophilicity maxima; vaccine; SIV;
KW
KW
     competitive inhibitor; feedback regulator; synthesis; gastrin precursor;
     charge; polarity; farnesyl synthetase; plasminogen activator inhibitor 1;
ΚW
     hydroxymethylglutaryl coenzyme A reductase; glucagon precursor; rhesus;
KW
     gonadoliberin precursor; plasminogen activator inhibitor 2; prorenin;
KW
KW
     Alzheimer amyloid A4; corticotropin releasing factor binding protein;
     apolipoprotein E; herpes virus 1 glycoprotein B; HSV1; human; OMVVS;
KW
     herpes virus 2 glycoprotein B; HSV2; collagenase; apolipoprotein A;
KW
     Treponema pallidum membrane protein; TMPA; islet amyloid polypeptide;
KW
KW
     fibroblast MMP1; schistosoma elastase precursor; schistosomin;
     hepatitis delta antigen; rev protein; HIV; VILV; angiotensinogen.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO9519568-A1.
XX
PD
     20-JUL-1995.
XX
PF
     12-JAN-1995;
                     95WO-US000575.
XX
     14-JAN-1994;
                     94US-00182248.
PR
XX
PΑ
     (RATH/) RATH M.
XX
PΙ
     Rath M;
```

XX

```
XX
     WPI; 1995-263953/34.
DR
XX
     Identifying signal oligopeptide(s) in protein sequence(s) - shown as
PT
     regions of max. hydrophilicity, used in modulating communication between
PT
     protein(s).
PT
XX
     Claim 5; Page 48; 88pp; English.
PS
XX
     The sequences given in AAW21201-560 represent hydrophilic signal oligo-
CC
     peptides. These signal oligopeptides are localised on the surface of the
CC
     protein and are represented by the hydrophilicity maxima of the protein.
CC
     These peptides are enriched in charged amino acids arranged with neutral
CC
     spacer amino acids. The specific signal character of these oligopeptides
CC
     is determined by a characteristic combination of conformation and charge
CC
     within the signal sequence. These oligopeptides may be used as vaccines
CC
     in the treatment of human disease, as competitive inhibitors to prevent
CC
     or reduce the metabolic action or interaction of a selected protein by
CC
     blocking its specific signal sequences, or as therapeutic agents to
CC
     function as feedback regulators to reduce synthesis rate of a selected
CC
     protein. These peptides may be modified by omitting one or more amino
CC
     acids at the N- and/or C-terminal, by substituting one or more amino
CC
     acids without consideration of charge and polarity, by substituting one
CC
     or more amino acids with amino acid residues with similar charge and/or
CC
     polarity, by omitting one or more amino acids or a combination of these
CC
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                              0;
                                0; Mismatches
                                                    0; Indels
                                                                      Gaps
             3; Conservative
            9 RRS 11
Qу
              | | |
            4 RRS 6
Db
RESULT 39
AAW21355
     AAW21355 standard; peptide; 11 AA.
TD
XX
AC
     AAW21355;
XX
                  (first entry)
DT
     29-JUL-1997
XX
     Gastrin precursor derived signal oligopeptide #13.
DE
XX
     Hydrophilic; signal oligopeptide; hydrophilicity maxima; vaccine; SIV;
KW
     competitive inhibitor; feedback regulator; synthesis; gastrin precursor;
KW
     charge; polarity; farnesyl synthetase; plasminogen activator inhibitor 1;
KW
     hydroxymethylglutaryl coenzyme A reductase; glucagon precursor; rhesus;
ΚW
     gonadoliberin precursor; plasminogen activator inhibitor 2; prorenin;
KW
     Alzheimer amyloid A4; corticotropin releasing factor binding protein;
KW
     apolipoprotein E; herpes virus 1 glycoprotein B; HSV1; human; OMVVS;
KW
     herpes virus 2 glycoprotein B; HSV2; collagenase; apolipoprotein A;
KW
     Treponema pallidum membrane protein; TMPA; islet amyloid polypeptide;
KW
     fibroblast MMP1; schistosoma elastase precursor; schistosomin;
KW
```

```
hepatitis delta antigen; rev protein; HIV; VILV; angiotensinogen.
ΚŴ
XX
OS
     Homo sapiens.
XX
     WO9519568-A1.
PN
XX
     20-JUL-1995.
PD
XX
                    95WO-US000575.
     12-JAN-1995;
ΡF
XX
     14-JAN-1994;
                    94US-00182248.
PR
XX
     (RATH/) RATH M.
PΑ
XX
     Rath M;
PI
XX
     WPI: 1995-263953/34.
DR
XX
     Identifying signal oligopeptide(s) in protein sequence(s) - shown as
PT
     regions of max. hydrophilicity, used in modulating communication between
PT
PT
     protein(s).
XX
     Claim 5; Page 48; 88pp; English.
PS
XX
     The sequences given in AAW21201-560 represent hydrophilic signal oligo-
CC
     peptides. These signal oligopeptides are localised on the surface of the
CC
     protein and are represented by the hydrophilicity maxima of the protein.
CC
     These peptides are enriched in charged amino acids arranged with neutral
CC
     spacer amino acids. The specific signal character of these oligopeptides
CC
     is determined by a characteristic combination of conformation and charge
CC
     within the signal sequence. These oligopeptides may be used as vaccines
CC
     in the treatment of human disease, as competitive inhibitors to prevent
CC
     or reduce the metabolic action or interaction of a selected protein by
CC
     blocking its specific signal sequences, or as therapeutic agents to
CC
     function as feedback regulators to reduce synthesis rate of a selected
CC
     protein. These peptides may be modified by omitting one or more amino
CC
     acids at the N- and/or C-terminal, by substituting one or more amino
CC
     acids without consideration of charge and polarity, by substituting one
CC
     or more amino acids with amino acid residues with similar charge and/or
CC
     polarity, by omitting one or more amino acids or a combination of these
CC
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
  Ouery Match
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
                                                                               0;
                                                                  0; Gaps
  Matches
             3; Conservative
                                 0; Mismatches
                                                    0; Indels
            9 RRS 11
Qу
              III
            1 RRS 3
Db
RESULT 40
AAR73972
     AAR73972 standard; peptide; 11 AA.
ΙD
XX
AC
     AAR73972;
```

```
XX
     13-DEC-1995 (first entry)
DT
XX
DE
    CD28 derived competitive peptide.
XX
     Inhibitor; CD28; phosphatidyl inositol 3-kinase; PI3-kinase; immune;
KW
     response; autoimmune disease.
KW
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FΗ
     Key
FT
     Modified-site
                     /note= "opt. phosphorylated."
FT
XX
PN
     WO9510628-A2.
XX
     20-APR-1995.
PD
XX
                    94WO-US010090.
PF
     09-SEP-1994;
XX
     28-SEP-1993;
                    93US-00128971.
PR
XX
     (DAND ) DANA FARBER CANCER INST INC.
PA
XX
     Rudd CE, Kanteti P;
PΙ
XX
DR
     WPI; 1995-161812/21.
XX
     Modulating signal transduction in T cells - by modifying the association
PT
     of CD28 with phosphatidyl:inositol 3-kinase to alter immune response.
РΤ
XX
PS
     Disclosure; Page 14; 51pp; English.
XX
     AAR73971 and AAR73972 are derived from Polyoma virus middle-T antigen.
CC
     They are used in peptide competition experiments to determine the
CC
     importance of the CD28 PI3-kinase binding motif Tyr-Met-X-Met. By
CC
     introducing into a T cell a peptide of the cytoplasmic tail of CD28, the
CC
     association of phosphatidyl inositol (PI) 3-kinase and CD28 can be
CC
     reduced. This results in a lowered immune response and is useful in the
CC
     treatment of autoimmune diseases e.g. systemic lupus erythematosis, type
CC
     1 diabetes and rheumatoid arthritis, it is also useful in preventing the
CC
CC
     rejection of transplanted organs and cells
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
                                                                              0;
                               0; Mismatches
                                                    0; Indels
                                                                  0;
                                                                      Gaps
             3; Conservative
  Matches
            8 PRR 10
Qу
              | | |
            9 PRR 11
Db
RESULT 41
```

RESULT 41 AAR64665

ID AAR64665 standard; peptide; 11 AA.

```
XX
AC
     AAR64665;
XX
                  (revised)
DT
     25-MAR-2003
DT
     04-SEP-1995
                  (first entry)
XX
     HPF3 peptide derivative 42, from anti-human parainfluenza virus.
DE
XX
     antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI;
KW
     human immunodeficiency virus; transmembrane protein; gp41; HPF3;
KW
     anti-human parainfluenza virus.
KW
XX
     Synthetic.
OS
XX
                     Location/Qualifiers
FH
     Key
     Modified-site
FT
                     /note= "optionally has an amino, acetyl, 9-
FT
                     fluorenylmethoxy-carbonyl, hydrophobic or macromolecular
FT
                     carrier gp. attached"
FT
     Modified-site
                     11
FT
                     /note= "optionally has a carboxyl, amido, hydrophobic or
FT
                     macromolecular carrier gp. attached"
FT
XX
     WO9428920-A1.
PN
XX
     22-DEC-1994.
PD
XX
                    94WO-US005739.
PF
     07-JUN-1994;
XX
PR
     07-JUN-1993;
                    93US-00073028.
XX
PA
     (UYDU-) UNIV DUKE.
XX
PΙ
     Bolognesi DP, Matthews TJ, Wild CT,
                                            Barney SO, Lambert DM;
PI
     Petteway SR;
XX
DR
     WPI; 1995-036105/05.
XX
     Computer search generated synthetic peptides - are inhibitors of HIV
PT
PT
     transmission.
XX
PS
     Claim 15; Page 140; 182pp; English.
XX
     AAR64657-88 are peptide derivatives of a 35 mer HPF3 peptide derived from
CC
     anti-human parainfluenza virus (AAR64656) which have been truncated at
CC
CC
     the amino terminus. The peptides are DP-178 like peptides. DP-178
     corresponds to amino acids 638 to 673 of the HIV-1 isolate LAI
CC
     transmembrane protein qp41. It forms a putative alpha helix at the C-
CC
     terminal end of the gp41 ectodomain, and complexes with DP-107
CC
CC
     (corresponds to amino acids 558-595) which contains a leucine zipper
CC
     motif. The peptides complex via non-covalent protein-protein
     interactions. The peptide derivatives were identified by a computer
CC
     assisted peptide sequence search. The antiviral activity of this peptide
CC
CC
     is not stated in the specification. (Updated on 25-MAR-2003 to correct PN
CC
     field.)
XX
SO
     Sequence 11 AA;
```

```
27.3%; Score 3; DB 2; Length 11;
 Ouery Match
                          100.0%; Pred. No. 8.3e+03;
 Best Local Similarity
                                                                 0; Gaps
                                                                             0;
                              0; Mismatches
                                                   0; Indels
            3; Conservative
            9 RRS 11
Qу
              | | |
           9 RRS 11
Db
RESULT 42
AAR90612
    AAR90612 standard; peptide; 11 AA.
ID
XX
    AAR90612;
AC
XX
    10-JUL-1996 (first entry)
DT
XX
    Lactoferrin derived peptide #28.
DΕ
XX
     Lactoferrin; antitumour; therapy; tumour; parenteral administration;
KW
     thermostable; cytotoxic; antibacterial.
KW
XX
OS
     Synthetic.
XX
     JP07309771-A.
ΡN
XX
     28-NOV-1995.
PD
XX
                    94JP-00103109.
PF
     17-MAY-1994;
XX
     17-MAY-1994;
                    94JP-00103109.
PR
XX
PΑ
     (MORG ) MORINAGA MILK IND CO LTD.
XX
DR
     WPI; 1996-045317/05.
XX
     Antitumour agent, derived from lactoferrin, for parenteral administration
PT
     - has few side effects and is thermally stable and water soluble.
PT
XX
PS
     Claim 1; Page 10; 10pp; Japanese.
XX
     AAR90585-R90613 represent lactoferrin derived peptides. These sequences
CC
     can be used as antitumour agents for parenteral administration. The
CC
     sequences are thermally stable, water soluble and stable in water. These
CC
     peptide sequences are only cytotoxic to tumour cells. Administration of
     these sequences results in few side effects. No antiseptic is required
CC
     for administration due to the antibacterial action of the peptide. Drugs
CC
     made from these peptides can be rapidly metabolised
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
            3; Conservative
                                                  0; Indels
                                                                              0;
  Matches
                              0; Mismatches
Qу
            9 RRS 11
```

```
||||
4 RRS 6
```

Db

```
RESULT 43
AAR87615
     AAR87615 standard; peptide; 11 AA.
XX
     AAR87615;
AC
XX
                  (first entry)
DΤ
    · 11-JUL-1996
XX
     Lactoferrin-derived anti-fungal peptide.
DE
XX
     Anti-fungal; water soluble; lactoferrin; stable; anti-bacterial;
KW
     rapidly metabolised.
KW
XX
     Synthetic.
OS
XX
                     Location/Qualifiers
FH
     Key
     Disulfide-bond
FT
                     /note= "forms disulphide bond with Cys at position 35 of
FT
                     peptide AAR87626"
FT
XX
PN
     JP07309774-A.
XX
PD
     28-NOV-1995.
XX
     17-MAY-1994;
                    94JP-00126882.
PF
XX
     17-MAY-1994;
PR
                    94JP-00126882.
XX
PΑ
     (MORG ) MORINAGA MILK IND CO LTD.
XX
DR
     WPI; 1996-045320/05.
XX
PT
     Water-soluble anti-fungus agent derived from lactoferrin - has
     antibacterial action and is not cytotoxic to animal cells.
PT
XX
PS
     Claim 1; Page 10; 11pp; Japanese.
XX
     AAR87599-R87627 are the active ingredients of an anti-fungal agent. The
CC
     agent has anti-bacterial as well as anti-fungal properties but is only
CC
     cytotoxic to fungal cells. The agent is water-soluble, hence drugs made
CC
     from the agent are rapidly metabolised. The peptides are derived from
CC
CC
     fragmented lactoferrin
XX
SO
     Sequence 11 AA;
```

```
Query Match 27.3%; Score 3; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 8.3e+03;
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0.
```

```
Qy 9 RRS 11
||| Db 4 RRS 6
```

```
RESULT 44
AAW49555
ΙD
     AAW49555 standard; peptide; 11 AA.
XX
AC
     AAW49555;
XX
     05-JUN-1998 (first entry)
DT
XX
     Human leucocyte antigen DQ4 binding peptide #446.
DΕ
XX
     Human leucocyte antigen; HLA-DQ4; combinatorial library;
KW
     autoimmune disease; chronic articular rheumatism.
KW
XX
OS
     Synthetic.
XX
     JP08151396-A.
PN
XX
PD
     11-JUN-1996.
XX
ΡF
     28-NOV-1994;
                    94JP-00292657.
XX
                    94JP-00292657.
PR
     28-NOV-1994;
XX
PA
     (TEIJ ) TEIJIN LTD.
XX
DR
     WPI; 1996-329479/33.
XX
     HLA-binding oligopeptide and an immuno: regulator contg it - used in the
PT
PT
     treatment of auto:immune disease.
XX
PS
     Claim 4; Page 49; 61pp; Japanese.
XX
     This peptide is an example of a peptide which binds to a human leucocyte
CC
     antigen HLA-DQ4 molecule. The peptide was isolated from a phagemid
CC
     combinatorial library comprising the sequence AAV05953, by screening with
CC
CC
     an HLA-DQ4 molecule. The peptide is used for the treatment of autoimmune
CC
     disease, or especially for treatment of viral diseases
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                               0;
            3; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
  Matches
            1 ARQ 3
Qу
              III
            5 ARO 7
Db
RESULT 45
AAR91858
     AAR91858 standard; peptide; 11 AA.
XX
AC
     AAR91858;
XX
DT
     20-SEP-1996 (first entry)
```

```
XX
     Lactoferrin-derived specific peptide, useful for wound healing.
DΕ
XX
     Bovine lactoferrin; wound healing; skin damage; burn; bedsore;
KW
KW
     heterodimer; intermolecular disulphide bond.
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FΉ
     Key
FT
     Cross-links
                     10
                     /label= disulphide
FT
                     /note= "forms disulphide bond with Cys35 of peptide
FT
                     sequence given in AAR91857"
FT
XX
     JP08081387-A.
PN
XX
PD
     26-MAR-1996.
XX
                    94JP-00241894.
PF
     09-SEP-1994;
XX
     09-SEP-1994;
                    94JP-00241894.
PR
XX
     (MORG ) MORINAGA MILK IND CO LTD.
PA
XX
DR
     WPI; 1996-217187/22.
XX
     Wound healing agent comprising specific peptide(s) - is heat resistant,
PT
     stable in aqueous solution and suitable for oral, external or
PT
     subcutaneous admin.
PT
XX
PS
     Claim 1; Page 11; 12pp; Japanese.
XX
CC
     The present peptide is useful in a novel wound healing agent. The agent
CC
     is thermostable and stable in aqueous solution. It is administered
CC
     externally, orally or subcutaneously for treatment of skin damage such as
     burns or bedsores
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                               0;
  Matches
             3; Conservative 0; Mismatches
                                                  0; Indels
                                                                  0; Gaps
            9 RRS 11
Qy
              \mathbf{I}
            4 RRS 6
RESULT 46
AAR96425
     AAR96425 standard; peptide; 11 AA.
ID
XX
    AAR96425;
AC
XX
DT
     07-MAR-1997 (first entry)
XX
     Hepatitis C virus type 1d peptide #2.
DE
```

```
Hepatitis C virus; subtype; polymerase chain reaction; amplification;
KW
     PCR; primer; probe; antibody; infection.
KW
XX
OS
     Synthetic.
XX
     WO9613590-A2.
PN
XX
     09-MAY-1996.
PD
XX
PF
     23-OCT-1995;
                    95WO-EP004155.
XX
     21-OCT-1994;
                    94EP-00870166.
PR
     28-JUN-1995;
                    95EP-00870076.
₽R
XX
     (INNO-) INNOGENETICS NV.
PΑ
XX
     Maertens G, Stuyver L;
PΙ
XX
     WPI; 1996-251460/25.
DR
XX
     Hepatitis C virus poly:nucleic acid unique to unidentified sub:type -
PT
     used to develop probes and primers for new sub:types and vaccines to
PT
     prevent and treat infection.
PT
XX
     Claim 5; Page 65; 150pp; English.
PS
XX
     The peptides AAR96424-R96524 represent novel peptides derived from the
CC
     novel hepatitis C virus subtypes 1d-f, 2e-i, 2k, 2l, 3g, 4k-m, 7a-c or
CC
     types 9, 10 or 11 (see AAT27937-T27989). The sequences corresp. to the 5'
CC
     untranslated region (UR), the Core/E1, NS4 or NS5B regions of the genome.
CC
     This sequence is from the HCV subtype 1d. The new HCV types were isolated
CC
CC
     from patients with chronic HCV from the Benelux countries, France,
CC
     Cameroon and Vietnam, because of their aberrant reactivities. The RNA was
CC
     extracted, cDNA synthesised and PCR amplified, cloned and genotyped. The
     5'UR, Core/E1 and NS5B regions were sequenced either directly or
CC
CC
     partially and used to classify the new viruses into (sub)types based on
CC
     comparison with known sequences. The nucleotide sequences can be used to
CC
     synthesise probes and primers for the detection of HCV in a sample. The
CC
     polypeptides can be used to detect anti-HCV antibodies, for HCV typing or
CC
     to prevent HCV infections
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
  Matches
             3; Conservative
                               0; Mismatches
                                                   0; Indels
                                                                  0;
                                                                      Gaps
                                                                              0;
            9 RRS 11
Qy
              \perp
            2 RRS 4
Db
RESULT 47
AAR96424
     AAR96424 standard; peptide; 11 AA.
XX
```

XX

```
AAR96424;
AC
XX
     07-MAR-1997 (first entry)
DT
XX
DΕ
     Hepatitis C virus type 1d peptide #1.
XX
     Hepatitis C virus; subtype; polymerase chain reaction; amplification;
KW
     PCR; primer; probe; antibody; infection.
KW
XX
OS
     Synthetic.
XX
     WO9613590-A2.
PN
XX
     09-MAY-1996.
PD
XX
     23-OCT-1995;
                    95WO-EP004155.
PF
XX
                    94EP-00870166.
PR
     21-OCT-1994;
                    95EP-00870076.
PR
     28-JUN-1995;
XX
     (INNO-) INNOGENETICS NV.
PA
XX
PΙ
     Maertens G,
                  Stuyver L;
XX
DR
     WPI; 1996-251460/25.
XX
     Hepatitis C virus poly:nucleic acid unique to unidentified sub:type -
PT
     used to develop probes and primers for new sub:types and vaccines to
PT
     prevent and treat infection.
PΤ
XX
PS
     Claim 5; Page 65; 150pp; English.
XX
CC
     The peptides AAR96424-R96524 represent novel peptides derived from the
CC
     novel hepatitis C virus subtypes 1d-f, 2e-i, 2k, 21, 3g, 4k-m, 7a-c or
CC
     types 9, 10 or 11 (see AAT27937-T27989). The sequences corresp. to the 5'
     untranslated region (UR), the Core/E1, NS4 or NS5B regions of the genome.
CC
CC
     This sequence is from the HCV subtype 1d. The new HCV types were isolated
CC
     from patients with chronic HCV from the Benelux countries, France,
CC
     Cameroon and Vietnam, because of their aberrant reactivities. The RNA was
     extracted, cDNA synthesised and PCR amplified, cloned and genotyped. The
CC
CC
     5'UR, Core/E1 and NS5B regions were sequenced either directly or
CC
     partially and used to classify the new viruses into (sub)types based on
     comparison with known sequences. The nucleotide sequences can be used to
CC
     synthesise probes and primers for the detection of HCV in a sample. The
CC
CC
     polypeptides can be used to detect anti-HCV antibodies, for HCV typing or
     to prevent HCV infections
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                              0;
             3; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
            1 ARQ 3
Qу
              Db
            1 ARQ 3
```

```
RESULT 48
AAR96834
     AAR96834 standard; peptide; 11 AA.
XX
AC
     AAR96834;
XX
DT
     16-OCT-2003
                  (revised)
                  (first entry)
DT
     29-NOV-1996
XX
     N.gonorrhoeae Iga alphal region, homologous to human Nfh protein.
DE
XX
     IqA protease precursor; IPP; bacterial polyprotein; autoimmune;
KW
     viral infection; rheumatoid arthritis; AIDS; meningococcal bacteria;
KW
     human neurofilament triplet h protein; Nfh.
KW
XX
     Neisseria gonorrhoeae; MS11.
OS
XX
                     Location/Qualifiers
FH
     Kev
     Region
                     1. .3
FT
                     /note= "identical to sequence in human neurofilament
FT
                     triplet h protein"
FT
FT
     Region
                     5. .7
                     /note= "identical to sequence in human neurofilament
\mathbf{FT}
                     triplet h protein"
FT
                     10. .11
FT
     Region
                     /note= "identical to sequence in human neurofilament
FT
                     triplet h protein"
FT
XX
PN
     W09609395-A2.
XX
PD
     28-MAR-1996.
XX
PF
     21-SEP-1995;
                    95WO-EP003726.
XX
PR
     21-SEP-1994;
                    94DE-04433708.
XX
PΑ
     (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX
PI
     Meyer TF, Pohlner J, Beck SC, Jose J, Woelk U, Lorenzen DR;
PΙ
     Oetzelberger KB;
XX
DR
     WPI; 1996-188456/19.
XX
PT
     Medicaments for treating auto-immune or viral diseases - contg.
PT
     substances interfering with bacterial poly:protein function.
XX
PS
     Claim 32; Fig 2; 117pp; German.
XX
CC
     The present sequence is a cleavage product from the Iga alpha 1 domain of
     the precursor of IgA-protease polyprotein (IPP) of N.gonorrhoeae strain
CC
     MS11. The Neisseria IPP has marked homology to certain human proteins and
CC
CC
     has been implicated in rheumatoid arthritis and other auto-immune
CC
     diseases. The polyprotein also activates proviruses, including HIV.
CC
     Substances which interfere with the function of IPP from Neisseria will
CC
     be useful for treating associated autoimmune diseases and viral
CC
     infections. The present peptide is homologous to a region from human
```

```
neurofilament triplet h protein. (Updated on 16-OCT-2003 to standardise
CC
     OS field)
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
             3; Conservative 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                               0;
            1 ARQ 3
Qу
              | \cdot |
            1 ARQ 3
Db
RESULT 49
AAR96835
     AAR96835 standard; peptide; 11 AA.
ID
XX
AC
     AAR96835;
XX
DΤ
     29-NOV-1996 (first entry)
XX
     Human neurofilament triplet h fragment, homologous to Neisseria Iga-
DE
DE
     alpha1.
XX
     IqA protease precursor; IPP; bacterial polyprotein; autoimmune;
KW
     viral infection; rheumatoid arthritis; AIDS; meningococcal bacteria;
KW
     human neurofilament triplet h protein; Nfh; Neisseria gonorrhoeae; MS11.
KW
XX
OS
     Homo sapiens.
XX
                     Location/Qualifiers
FH
     Key
                     1. .3
FT
     Region
FT
                     /note= "identical to sequence in Neisseria gonorrhoeae
FT
                     Iga-alpha1"
                     5. .7
FT
     Region
FT
                     /note= "identical to sequence in Neisseria gonorrhoeae
FT
                     Iga-alphal"
FT
                     10. .11
     Region
                     /note= "identical to sequence in Neisseria gonorrhoeae
FT
FT
                     Iga-alpha1"
XX
PN
     WO9609395-A2.
XX
PD
     28-MAR-1996.
XX
PF
     21-SEP-1995;
                    95WO-EP003726.
XX
PR
     21-SEP-1994;
                    94DE-04433708.
XX
PA
     (PLAC ) MAX PLANCK GES FOERDERUNG WISSENSCHAFTEN.
XX
PΙ
     Meyer TF, Pohlner J, Beck SC, Jose J, Woelk U, Lorenzen DR;
PΙ
     Oetzelberger KB;
XX
DR
     WPI; 1996-188456/19.
XX
```

```
Medicaments for treating auto-immune or viral diseases - contg.
PT
     substances interfering with bacterial poly:protein function.
PT
XX
PS
     Claim 32; Fig 2; 117pp; German.
XX
     The present sequence from human neurofilament triplet h protein has
CC
     homology to a cleavage product from the Iga-alphal domain of the
CC
    precursor of IgA-protease polyprotein (IPP) of Neisseria gonorrhoeae
CC
     strain MS11. The Neisseria IPP has been implicated in rheumatoid
CC
     arthritis and other auto-immune diseases. The polyprotein also activates
CC
    proviruses, including HIV. Substances which interfere with the function
CC
    of IPP from Neisseria will be useful for treating associated autoimmune
CC
     diseases and viral infections. Peptides comprising the homology region
CC
     sequences, whether from Neisseria or from humans, are claimed
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                              0;
                                                                  0; Gaps
            3; Conservative
                                 0; Mismatches
                                                   0; Indels
  Matches
            1 ARQ 3
Qy
              \perp
Db
            1 ARQ 3
RESULT 50
AAW10520
     AAW10520 standard; peptide; 11 AA.
XX
AC
     AAW10520;
XX
                  (first entry)
DT
     02-APR-1997
XX
     Lactoferrin derived antibacterial peptide.
DE
XX
     Lactoferrin; antibacterial; immunogen; monoclonal; antibody; human;
KW
     bovine; hybridoma; sensitive; specific; detection; determination;
KW
     gastric juice; intestine; faeces; blood; urine.
KW
XX
     Synthetic.
OS
XX
     JP08269099-A.
PN
XX
     15-OCT-1996.
PD
XX
                    95JP-00073177.
PF
     30-MAR-1995;
XX
     30-MAR-1995;
                    95JP-00073177.
PR
XX
     (MORG ) MORINAGA MILK IND CO LTD.
PA
XX
     WPI; 1996-515017/51.
DR
XX
     Monoclonal antibody combined with bovine or non-natural human lactoferrin
PT
     fragment - for detecting lactoferrin-originated antibacterial peptide in
PT
PT
     e.g. gastric juice, urine etc.
```

```
XX
     Claim 3; Page 12; 13pp; Japanese.
PS
XX
     The present peptide is a lactoferrin (LF) derived antibacterial peptide,
CC
     which can be used as an immunogen in the prepn. of a monoclonal antibody
CC
     (MAb), capable of binding with a human or bovine LF fragment but not with
CC
     natural LF, using standard hybridoma techniques. The MAb can be used for
CC
     the highly sensitive and specific detection or determination of LF
CC
     derived antibacterial peptides in gastric juice, intestinal contents,
CC
     faeces, blood and urine
CC
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                               0;
                                                                  0; Gaps
             3; Conservative
                                 0; Mismatches
                                                    0;
                                                       Indels
  Matches
            9 RRS 11
Qу
              +
            4 RRS 6
Db
RESULT 51
AAW10518
     AAW10518 standard; peptide; 11 AA.
ΙD
XX
AC
     AAW10518;
XX
     02-APR-1997
                  (first entry)
DT
XX
     Lactoferrin derived antibacterial dimeric peptide.
DΕ
XX
     Lactoferrin; antibacterial; immunogen; monoclonal; antibody; human;
KW
     bovine; hybridoma; sensitive; specific; detection; determination;
KW
     gastric juice; intestine; faeces; blood; urine; dimer.
KW
XX
     Synthetic.
OS
XX
                     Location/Qualifiers
FH
     Key
FT
     Cross-links
                     /note= "disulfide bonded to Cys 35 of AAW10517"
FT
XX
     JP08269099-A.
PN
XX
     15-OCT-1996.
PD
XX
                    95JP-00073177.
PF
     30-MAR-1995;
XX
     30-MAR-1995;
                    95JP-00073177.
PR
XX
     (MORG ) MORINAGA MILK IND CO LTD.
PA
XX
     WPI; 1996-515017/51.
DR
XX
     Monoclonal antibody combined with bovine or non-natural human lactoferrin
PT
     fragment - for detecting lactoferrin-originated antibacterial peptide in
PT
PT
     e.g. gastric juice, urine etc.
```

```
XX
     Claim 3; Page 12; 13pp; Japanese.
PS
XX
     The present peptide is a lactoferrin (LF) derived dimeric antibacterial
CC
    peptide, which can be used as an immunogen in the prepn. of a monoclonal
CC
     antibody (MAb), capable of binding with a human or bovine LF fragment but
CC
     not with natural LF, using standard hybridoma techniques. The MAb can be
CC
     used for the highly sensitive and specific detection or determination of
CC
     LF derived antibacterial peptides in gastric juice, intestinal contents,
CC
     faeces, blood and urine
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                              0;
                                                    0; Indels
                                                                  0; Gaps
             3; Conservative
                                0; Mismatches
            9 RRS 11
Qу
              111
            4 RRS 6
Db
RESULT 52
AAW00844
     AAW00844 standard; peptide; 11 AA.
ID
XX
AC
     AAW00844;
XX
     30-DEC-1996 (first entry)
DT
XX
DE
     PERB11-4D peptide.
XX
KW
     PERB11 gene; major histocompatibility complex; MHC; polymorphism;
     haplotype; vaccine; therapy; diagnosis; psoriasis;
KW
     nasopharyngeal carcinoma; spondyloarthropathy; myasthenia gravis; IgAd;
KW
     CVI; cerebral malaria; rheumatoid arthritis; AIDS; cachexia.
KW
XX
OS
     Synthetic.
XX
     WO9630511-A1.
PN
XX
PD
     03-OCT-1996.
XX
     29-MAR-1996;
                    96WO-AU000184.
PF
XX
PR
     29-MAR-1995;
                    95AU-00002014.
PR
     29-MAR-1995;
                    95AU-00002015.
XX
PA
     (IMMU-) IMMUNOGENETICS RES FOUND INC.
XX
PΙ
     Dawkins RL;
XX
     WPI; 1996-455358/45.
DR
XX
PT
     Sequences relevant to MHC associated disease - used for vaccine
     preparation and diagnosis of, e.g. Psoriasis, Nasopharyngeal carcinoma(s)
PT
PT
     and Spondyloarthropathies and Myasthenia gravis.
```

```
Claim 17; Page 52; 94pp; English.
PS
XX
     Peptides PERB11-4D (AAW00844) and PERB11-5D (AAW05276) are located within
CC
CC
     the alpha-1 domain of PERB11.1 proteins (see also AAW00839-43) from 5
    major histocompatibility complex (MHC) ancestral haplotypes; peptide
CC
     PERB11-6D (AAW05277) is located in the alpha-2 domain. PERB11 is a
CC
     polymorphic gene family (see also AAT39575-78) with multiple copies
CC
     within the MHC. Antibodies raised against the PERB11 peptides can be used
CC
     to identify and purify proteins related to MHC-associated diseases
CC
XX
     Sequence 11 AA;
SO
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                               0;
             3; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
            2 RQK 4
Qу
              \mathbf{H}
            3 ROK 5
RESULT 53
AAW24272
     AAW24272 standard; peptide; 11 AA.
ΙD
XX
AC
     AAW24272;
XX
     15-OCT-1997 (first entry)
DT
XX
     Antifungal peptide #8, derived from lactoferrin.
DE
XX
KW
     Lactoferrin; hydrolysis; antifungal agent; hydrolysate; food;
ΚW
     azole-type anti-fungal compound; dermatophytosis; dermatomycosis.
XX
OS
     Synthetic.
XX
PN
     JP09165342-A.
XX
PD
     24-JUN-1997.
XX
PF
     14-DEC-1995;
                    95JP-00347405.
XX
PR
     14-DEC-1995;
                    95JP-00347405.
XX
     (MORG ) MORINAGA MILK IND CO LTD.
PA
XX
DR
     WPI; 1997-381279/35.
XX
РΤ
     Antifungal agents containing azole(s) and lactoferrin hydrolysate - for
PT
     treatment of dermatophytosis and dermatomycosis.
XX
PS
     Claim 4; Page 10; 10pp; Japanese.
XX
CC
     The sequences given in AAW24265-72 are peptides which are derived from
CC
     lactoferrin by hydrolysis. These peptides may be used in the antifungal
     agents of the invention which also contain as the active component an
CC
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XX

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azole-type anti-fungal compound. The antifungal agents are used for
CC
     treatment of dermatophytosis and dermatomycosis. The antifungal agents of
CC
     this invention show the same as or higher effect at one quarter to one
CC
     sixteenth the dose of known antifungal compounds, so the dose of these
CC
CC
     compounds having adverse reactions can be reduced. Lactoferrin
     hydrolysates have no toxicity since they have been used as a part of food
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
                                0; Mismatches
                                                                   0; Gaps
                                                                               0;
            3; Conservative
                                                   0; Indels
            9 RRS 11
Qy
              \parallel \parallel \parallel
            4 RRS 6
RESULT 54
AAW10445
    AAW10445 standard; peptide; 11 AA.
ID
XX
AC
    AAW10445;
XX
DΤ
     25-MAR-2003 (revised)
     11-AUG-1997 (first entry)
DT
XX
     Human growth hormone Leu-73 substitution peptide.
DE
XX
     Active site; active domain; growth hormone; somatogenic receptor;
KW
KW
     mutagenesis.
XX
os
     Synthetic.
XX
PN
     US5580723-A.
XX
PD
     03-DEC-1996.
XX
PF
     02-FEB-1994;
                    94US-00190723.
XX
PR
     28-OCT-1988;
                    88US-00264611.
PR
     26-OCT-1989;
                    89US-00428066.
     27-APR-1992;
PR
                    92US-00875204.
PR
     13-OCT-1992;
                    92US-00960227.
XX
PΑ
     (GETH ) GENENTECH INC.
XX
     Cunningham BC, Wells JA;
PΙ
XX
DR
     WPI; 1997-033563/03.
XX
     Identification of unknown active domains in polypeptide(s) - useful for
PT
     analysis of structure and function of hormones, etc.
PT
XX
PS
     Disclosure; Col 26; 86pp; English.
XX
CC
     Substitution peptides (AAW10441-62) were used to identify specific amino
```

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acid residues in human growth hormone (hGH) (AAW10425) which are expected
     to product hGH variants having altered biological functions. The method
CC
     involved substituting selected amino acid segments of hGH with analogous
CC
     segments from analogue polypeptides (human placenta lactogen, human
CC
CC
     prolactin and pig growth hormone) and examining the effect of the
     substns. on interaction with the soluble hGH receptor (see also
CC
     AAW10426). Once active site domains had been detd., amino acid residues
CC
     within these domains were replaced sequentially with alanine, and the
CC
     effects on interaction with the hGH receptor were again examined. Leu-73
CC
     was identified by this method; the preferred amino acid substn. for this
CC
     residue is given in AAW10445. Active site residues have also been
CC
     identified (see also AAW10427-40). (Updated on 25-MAR-2003 to correct PF
CC
CC
     field.)
XX
SO
     Sequence 11 AA;
                           27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
                                                                               0;
            3; Conservative 0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
            1 ARQ 3
Qy
              \parallel \parallel \parallel \parallel
            5 ARQ 7
Db
RESULT 55
AAW10434
     AAW10434 standard; peptide; 11 AA.
XX
AC
     AAW10434;
XX
DT
     25-MAR-2003 (revised)
     11-AUG-1997
                  (first entry)
DT
XX
DE
     Human growth hormone active site Lys-172 substitution peptide.
XX
KW
     Active site; active domain; growth hormone; somatogenic receptor;
KW
     mutagenesis.
XX
OS
     Synthetic.
XX
PN
     US5580723-A.
XX
PD
     03-DEC-1996.
XX
     02-FEB-1994;
PF
                    94US-00190723.
XX
PR
     28-OCT-1988;
                    88US-00264611.
PR
     26-OCT-1989;
                    89US-00428066.
PR
     27-APR-1992;
                    92US-00875204.
PR
     13-OCT-1992;
                    92US-00960227.
XX
PA
     (GETH ) GENENTECH INC.
XX
PΙ
     Cunningham BC, Wells JA;
XX
DR
     WPI; 1997-033563/03.
```

CC

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XX
     Identification of unknown active domains in polypeptide(s) - useful for
PT
     analysis of structure and function of hormones, etc.
PT
XX
PS
     Disclosure; Col 24; 86pp; English.
XX
     Substitution peptides (AAW10427-40) were used to identify active site
CC
     amino acids within active domains of human growth hormone (hGH)
CC
     (AAW10425). The method involved substituting selected amino acid segments
CC
     of hGH with analogous segments from analogue polypeptides (human placenta
CC
     lactogen, human prolactin and pig growth hormone) and examining the
CC
     effect of the substns. on interaction with the soluble hGH receptor (see
CC
     also AAW10426). Once active site domains had been detd., amino acid
CC
     residues within these domains were replaced sequentially with alanine,
CC
     and the effects on interaction with the hGH receptor were again examined.
CC
     Lys-172 was identified as an active site residue by this method; the
CC
     preferred amino acid substn. for this residue is given in AAW10434.
CC
     (Updated on 25-MAR-2003 to correct PF field.)
CC
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                                                               0;
                                                                  0; Gaps
                                 0; Mismatches
                                                    0; Indels
  Matches
             3; Conservative
            1 ARQ 3
Qу
              \pm 111
Db
            5 ARO 7
RESULT 56
AAW10451
     AAW10451 standard; peptide; 11 AA.
XX
     AAW10451;
AC
XX
     25-MAR-2003
                  (revised)
DT
     11-AUG-1997
                  (first entry)
DT
XX
     Human growth hormone Asn-99 substitution peptide.
DE
XX
     Active site; active domain; growth hormone; somatogenic receptor;
KW
KW
     mutagenesis.
XX
OS
     Synthetic.
XX
     US5580723-A.
PN
XX
PD
     03-DEC-1996.
XX
                    94US-00190723.
PF
     02-FEB-1994;
XX
                    88US-00264611.
PR
     28-OCT-1988;
                    89US-00428066.
PR
     26-OCT-1989;
                    92US-00875204.
PR
     27-APR-1992;
     13-OCT-1992;
                    92US-00960227.
PR
XX
```

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PΑ
     (GETH ) GENENTECH INC.
XX
PΙ
     Cunningham BC, Wells JA;
XX
     WPI; 1997-033563/03.
DR
XX
     Identification of unknown active domains in polypeptide(s) - useful for
PT
     analysis of structure and function of hormones, etc.
PT
XX
     Disclosure; Col 26; 86pp; English.
PS
XX
     Substitution peptides (AAW10441-62) were used to identify specific amino
CC
     acid residues in human growth hormone (hGH) (AAW10425) which are expected
CC
     to product hGH variants having altered biological functions. The method
CC
     involved substituting selected amino acid segments of hGH with analogous
CC
     segments from analogue polypeptides (human placenta lactogen, human
CC
     prolactin and pig growth hormone) and examining the effect of the
CC
     substns. on interaction with the soluble hGH receptor (see also
CC
     AAW10426). Once active site domains had been detd., amino acid residues
CC
     within these domains were replaced sequentially with alanine, and the
CC
     effects on interaction with the hGH receptor were again examined. Asn-99
CC
     was identified by this method; the preferred amino acid substn. for this
CC
     residue is given in AAW10451. Active site residues have also been
CC
     identified (see also AAW10427-40). (Updated on 25-MAR-2003 to correct PF
CC
CC
     field.)
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
                                                                              0;
                                0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
  Matches
             3; Conservative
            1 ARQ 3
Qу
              | | |
            5 ARQ 7
Db
RESULT 57
AAW10433
     AAW10433 standard; peptide; 11 AA.
XX
AC
     AAW10433;
XX
DT
     25-MAR-2003
                 (revised)
DT
     11-AUG-1997
                  (first entry)
XX
     Human growth hormone active site Asp-171 substitution peptide.
DE
XX
KW
     Active site; active domain; growth hormone; somatogenic receptor;
KW
     mutagenesis.
XX.
OS
     Synthetic.
XX
PN.
     US5580723-A.
XX
     03-DEC-1996.
PD
XX
```

```
02-FEB-1994;
                    94US-00190723.
PF
XX
PR
     28-OCT-1988;
                    88US-00264611.
PR
     26-OCT-1989;
                    89US-00428066.
     27-APR-1992;
                    92US-00875204.
PR
     13-OCT-1992;
                    92US-00960227.
PR
XX
     (GETH ) GENENTECH INC.
PA
XX
PΙ
     Cunningham BC, Wells JA;
XX
     WPI; 1997-033563/03.
DR
XX
PT
     Identification of unknown active domains in polypeptide(s) - useful for
PT
     analysis of structure and function of hormones, etc.
XX .
     Disclosure; Col 24; 86pp; English.
PS
XX
     Substitution peptides (AAW10427-40) were used to identify active site
CC
     amino acids within active domains of human growth hormone (hGH)
CC
     (AAW10425). The method involved substituting selected amino acid segments
CC
     of hGH with analogous segments from analogue polypeptides (human placenta
CC
     lactogen, human prolactin and pig growth hormone) and examining the
CC
     effect of the substns. on interaction with the soluble hGH receptor (see
CC
     also AAW10426). Once active site domains had been detd., amino acid
CC
     residues within these domains were replaced sequentially with alanine,
CC
     and the effects on interaction with the hGH receptor were again examined.
CC
CC
     Asp-171 was identified as an active site residue by this method; the
     preferred amino acid substn. for this residue is given in AAW10433.
CC
CC
     (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
                              0; Mismatches
                                                   0; Indels
                                                                              0;
 Matches
            3; Conservative
                                                                  0; Gaps
            1 ARQ 3
Qу
              | | | |
            5 ARQ 7
Db
RESULT 58
AAW10459
     AAW10459 standard; peptide; 11 AA.
XX
AC
    AAW10459;
XX
DT
     25-MAR-2003 (revised)
DΤ
     11-AUG-1997 (first entry)
XX
     Human growth hormone Asp-26 substitution peptide.
DΕ
XX
KW
     Active site; active domain; growth hormone; somatogenic receptor;
KW
     mutagenesis.
XX
OS
     Synthetic.
```

```
XX
     US5580723-A.
PN
XX
PD
     03-DEC-1996.
XX
                    94US-00190723.
PF
     02-FEB-1994;
XX
     28-OCT-1988;
                    88US-00264611.
PR
     26-OCT-1989;
                    89US-00428066.
PR
                    92US-00875204.
PR
     27-APR-1992;
PR
     13-OCT-1992;
                    92US-00960227.
XX
     (GETH ) GENENTECH INC.
PA
XX
PΙ
     Cunningham BC, Wells JA;
XX
     WPI; 1997-033563/03.
DR
XX
     Identification of unknown active domains in polypeptide(s) - useful for
PT
     analysis of structure and function of hormones, etc.
PТ
XX
PS
     Disclosure; Col 26; 86pp; English.
XX
     Substitution peptides (AAW10441-62) were used to identify specific amino
CC
     acid residues in human growth hormone (hGH) (AAW10425) which are expected
CC
     to product hGH variants having altered biological functions. The method
CC
     involved substituting selected amino acid segments of hGH with analogous
CC
     segments from analogue polypeptides (human placenta lactogen, human
CC
     prolactin and pig growth hormone) and examining the effect of the
CC
CC
     substns. on interaction with the soluble hGH receptor (see also
CC
     AAW10426). Once active site domains had been detd., amino acid residues
CC
     within these domains were replaced sequentially with alanine, and the
     effects on interaction with the hGH receptor were again examined. Asp-26
CC
CC
     was identified by this method; the preferred amino acid substn. for this
     residue is given in AAW10459. Active site residues have also been
CC
     identified (see also AAW10427-40). (Updated on 25-MAR-2003 to correct PF
CC
CC
     field.)
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
  Matches
            3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                              0;
            1 ARQ 3
Qу
              111
            5 ARQ 7
Db
RESULT 59
AAW10441
     AAW10441 standard; peptide; 11 AA.
XX
AC
     AAW10441;
XX
DT
     25-MAR-2003 (revised)
DT
     11-AUG-1997 (first entry)
```

```
XX
     Human growth hormone Ser-43 substitution peptide.
DΕ
XX
KW
     Active site; active domain; growth hormone; somatogenic receptor;
KW
    mutagenesis.
XX
OS
     Synthetic.
XX
ΡN
    US5580723-A.
XX
     03-DEC-1996.
PD
XX
                    94US-00190723.
PF
     02-FEB-1994;
XX
                    88US-00264611.
PR
     28-OCT-1988;
PR
     26-OCT-1989;
                    89US-00428066.
PR
     27-APR-1992;
                    92US-00875204.
                    92US-00960227.
PR
    13-OCT-1992;
XX
PΑ
     (GETH ) GENENTECH INC.
XX
PΙ
    Cunningham BC, Wells JA;
XX
DR
    WPI: 1997-033563/03.
XX
РΤ
     Identification of unknown active domains in polypeptide(s) - useful for
PT
    analysis of structure and function of hormones, etc.
XX
PS
    Disclosure; Col 26; 86pp; English.
XX
     Substitution peptides (AAW10441-62) were used to identify specific amino
CC
CC
     acid residues in human growth hormone (hGH) (AAW10425) which are expected
CC
     to product hGH variants having altered biological functions. The method
CC
     involved substituting selected amino acid segments of hGH with analogous
CC
     segments from analogue polypeptides (human placenta lactogen, human
CC
    prolactin and pig growth hormone) and examining the effect of the
CC
    substns. on interaction with the soluble hGH receptor (see also
CC
    AAW10426). Once active site domains had been detd., amino acid residues
CC
    within these domains were replaced sequentially with alanine, and the
CC
    effects on interaction with the hGH receptor were again examined. Ser-43
CC
    was identified by this method; the preferred amino acid substn. for this
CC
     residue is given in AAW10441. Active site residues have also been
     identified (see also AAW10427-40). (Updated on 25-MAR-2003 to correct PF
CC
CC
     field.)
XX
SQ
     Sequence 11 AA;
 Query Match
                          27.3%; Score 3; DB 2; Length 11;
 Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
            3; Conservative
                                0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
            1 ARQ 3
Qу
              5 ARQ 7
```

```
AAW10453
     AAW10453 standard; peptide; 11 AA.
ΙD
XX
AC
     AAW10453;
XX
DT
     25-MAR-2003 (revised)
     11-AUG-1997
                  (first entry)
DT
XX
DE
     Human growth hormone Leu-101 substitution peptide.
XX
     Active site; active domain; growth hormone; somatogenic receptor;
KW
KW
     mutagenesis.
XX
OS
     Synthetic.
XX
     US5580723-A.
PN
XX
     03-DEC-1996.
PD
XX
     02-FEB-1994;
                    94US-00190723.
PF
XX
     28-OCT-1988;
                    88US-00264611.
PR
                    89US-00428066.
PR
     26-OCT-1989;
     27-APR-1992;
                    92US-00875204.
PR
                    92US-00960227.
PR
     13-OCT-1992;
XX
PΑ
     (GETH ) GENENTECH INC.
XX
     Cunningham BC, Wells JA;
PI
XX
DR
     WPI; 1997-033563/03.
XX
PT
     Identification of unknown active domains in polypeptide(s) - useful for
PT
     analysis of structure and function of hormones, etc.
XX
     Disclosure; Col 26; 86pp; English.
PS
XX
     Substitution peptides (AAW10441-62) were used to identify specific amino
CC
     acid residues in human growth hormone (hGH) (AAW10425) which are expected
CC
     to product hGH variants having altered biological functions. The method
CC
CC
     involved substituting selected amino acid segments of hGH with analogous
CC
     segments from analogue polypeptides (human placenta lactogen, human
     prolactin and pig growth hormone) and examining the effect of the
CC
     substns. on interaction with the soluble hGH receptor (see also
CC
     AAW10426). Once active site domains had been detd., amino acid residues
CC
CC
     within these domains were replaced sequentially with alanine, and the
     effects on interaction with the hGH receptor were again examined. Leu-101
CC
     was identified by this method; the preferred amino acid substn. for this
CC
     residue is given in AAW10453. Active site residues have also been
CC
CC
     identified (see also AAW10427-40). (Updated on 25-MAR-2003 to correct PF
CC
     field.)
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
  Matches
             3; Conservative
                              0; Mismatches 0; Indels
                                                                  0; Gaps
                                                                              0;
```

```
1 ARQ 3
QУ
              \parallel \parallel \parallel \parallel
Db
            5 ARQ 7
RESULT 61
AAW25322
     AAW25322 standard; peptide; 11 AA.
ID
XX
AC
     AAW25322;
XX
     14-OCT-1997 (first entry)
DT
XX
     Peptide clone LacI-19 specific for monoclonal antibody D32.39.
DE
XX
     Monoclonal antibody D32.39; lacI; headpiece domain; DNA binding protein;
KW
     random peptide library; receptor ligand; dimer; fusion protein; epitope;
KW
KW
     antibody.
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Key
FT
                      6. .11
     Region
                      /note= "partial D32.39 antibody epitope"
FT
XX
PN
     WO9640987-A1.
XX
PD
     19-DEC-1996.
XX
     07-JUN-1996;
                    96WO-US009809.
PF
XX
     07-JUN-1995;
                    95US-00484090.
PR
PR
     26-OCT-1995;
                    95US-00548540.
XX
     (AFFY-) AFFYMAX TECHNOLOGIES NV.
PA
XX
ΡI
     Schatz PJ, Cull MG, Miller JF, Stemmer WPC, Gates CM;
XX
DR
     WPI; 1997-087065/08.
XX
PT
     Random peptide library and affinity enrichment methods for screening it -
PT
     useful to identify peptide(s) that bind receptors, useful for
PT
     therapeutic, diagnostic and related purposes.
XX
РS
     Example 5; Fig 8; 149pp; English.
XX
     AAW25289-W25324 represent D32.39 monoclonal antibody specific peptides.
CC
     These sequences were isolated by a method of the invention to isolate a
CC
     DNA binding protein, or a peptide with specific affinity for a receptor.
CC
     The method comprises providing a recombinant DNA vector encoding a
CC
     peptide having specific affinity for a receptor. A library of
CC
CC
     oligonucleotides encoding different potential DNA binding proteins is
CC
     inserted in-frame into the vector to create a fusion protein library.
CC
     Host cells are transformed, and cultured to express the fusion protein.
CC
     If a fusion protein comprises a potential DNA binding protein with
CC
     affinity for the vector, the fusion protein binds to the vector to form a
```

```
complex. The host cells are lysed to isolate the complexes which are
CC
     contacted with a receptor to induce peptide binding to the receptor. The
CC
     random peptide library and the methods for screening it can be used to
CC
     identify peptides that bind receptor molecules of interest. The peptides
CC
     can be used for therapeutic, diagnostic and related purposes, e.g. to
CC
    bind the receptor, or an analogue, and so inhibit or promote the activity
CC
     of the receptor. The method of affinity enrichment allows a very large
CC
    library of peptides to be screened, and by identifying the peptide de
CC
    novo, the sequence or structure of the receptor molecule or the natural
CC
    binding partner of the receptor need not be known
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
            3; Conservative
                               0; Mismatches
            9 RRS 11
Qу
              \perp
            5 RRS 7
Db
RESULT 62
AAW25307
    AAW25307 standard; peptide; 11 AA.
ΙD
XX
AC
    AAW25307;
XX
     14-OCT-1997 (first entry)
DΤ
XX
     Peptide clone LacI-1 specific for monoclonal antibody D32.39.
DE
XX
     Monoclonal antibody D32.39; lacI; headpiece domain; DNA binding protein;
KW
     random peptide library; receptor ligand; dimer; fusion protein; epitope;
KW
KW
     antibody.
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Key
FT
     Region
                     6. .11
                     /note= "partial D32.39 antibody epitope"
FT
XX
PN
    W09640987-A1.
XX
PD
     19-DEC-1996.
XX
PF
     07-JUN-1996;
                    96WO-US009809.
XX
PR
     07-JUN-1995;
                    95US-00484090.
PR
     26-OCT-1995;
                    95US-00548540.
XX
PΑ
     (AFFY-) AFFYMAX TECHNOLOGIES NV.
XX
PΙ
     Schatz PJ, Cull MG, Miller JF, Stemmer WPC, Gates CM;
XX
DR
     WPI; 1997-087065/08.
XX
```

```
Random peptide library and affinity enrichment methods for screening it -
PT
     useful to identify peptide(s) that bind receptors, useful for
PT
     therapeutic, diagnostic and related purposes.
PT
XX
_{\mathrm{PS}}
     Example 5; Fig 8; 149pp; English.
XX
    AAW25289-W25324 represent D32.39 monoclonal antibody specific peptides.
CC
    These sequences were isolated by a method of the invention to isolate a
CC
     DNA binding protein, or a peptide with specific affinity for a receptor.
CC
    The method comprises providing a recombinant DNA vector encoding a
CC
    peptide having specific affinity for a receptor. A library of
CC
    oligonucleotides encoding different potential DNA binding proteins is
CC
     inserted in-frame into the vector to create a fusion protein library.
CC
    Host cells are transformed, and cultured to express the fusion protein.
CC
     If a fusion protein comprises a potential DNA binding protein with
CC
     affinity for the vector, the fusion protein binds to the vector to form a
CC
     complex. The host cells are lysed to isolate the complexes which are
CC
     contacted with a receptor to induce peptide binding to the receptor. The
CC
     random peptide library and the methods for screening it can be used to
CC
CC
     identify peptides that bind receptor molecules of interest. The peptides
     can be used for therapeutic, diagnostic and related purposes, e.g. to
CC
    bind the receptor, or an analogue, and so inhibit or promote the activity
CC
     of the receptor. The method of affinity enrichment allows a very large
CC
     library of peptides to be screened, and by identifying the peptide de
CC
    novo, the sequence or structure of the receptor molecule or the natural
CC
    binding partner of the receptor need not be known
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 8.3e+03;
                                0; Mismatches
                                                                              0;
 Matches
             3; Conservative
                                                   0; Indels
                                                                      Gaps
            9 RRS 11
Qу
              \mathbf{I}
            5 RRS 7
Db
RESULT 63
AAW09807
     AAW09807 standard; peptide; 11 AA.
XX
AC
    AAW09807;
XX
DT
     25-MAR-2003
                  (revised)
DT
     12-JUN-1997
                  (first entry)
XX
     N-terminal peptide fragment of erythrocyte cytoplasmic PAF-AH.
DE
XX
KW
     Human platelet-activating factor acetylhydrolase; PAF-AH; detection;
KW
     mutation; V279F; substitution; restriction fragment length polymorphism;
     analysis; diagnosis; inherited; deficiency; severe respiratory symptom;
KW
     asthmatic children; treat; inflammatory condition.
KW
XX
OS
     Synthetic.
XX
ΡN
     US5605801-A.
```

```
XX
     25-FEB-1997.
PD
XX
PF
     07-JUN-1995;
                    95US-00478465.
XX
     06-OCT-1993;
                    93US-00133803.
PR
     06-OCT-1994;
                    94US-00318905.
PR
XX
     (ICOS-) ICOS CORP.
PΑ
XX
PΙ
     Gray P, Tjoelker LW,
                            Trong HL, Cousens LS,
                                                    Wilder CL;
     Eberhardt CD;
PΙ
XX
     WPI; 1997-153573/14.
DR
XX
     Detection of platelet-activating factor acetyl:hydrolase gene mutation -
PT
PT
     by restriction length polymorphism analysis.
XX
     Example 2; Col 11; 43pp; English.
PS
XX
     An approx. 44 kDa protein band from a human platelet-activating factor
CC
     acetylhydrolase (PAF-AH)-containing PVDF membrane was excised and
CC
     sequenced. N-terminal sequence analysis of the 44 kDa protein band
CC
CC
     corresponding to the PAF-AH activity indicated that the band contained
     two major and two minor sequences. The ratio of the two major sequences
CC
     was 1:1 and it was therefore difficult to interpret the data. To
CC
     distinguish the sequences of the two major proteins which had been
CC
     resolved on the SDS gel, a duplicate PVDF membrane contg. the 44 kDa band
CC
     was cut in half such that the upper and lower part of the membrane were
CC
CC
     separately subjected to sequencing. AAW09805-06 are the N-terminal
CC
     peptide sequences obtained. It was revealed that AAW09806 was the novel
     sequence representing the N-terminal peptide of human PAF-AH. It was
CC
CC
     compared against the present sequence which is the N-terminal sequence of
CC
     erythrocyte cytoplasmic PAF-AH. The claimed method of the invention
CC
     detects a mutation (which results in a V279F substitution) in the PAF-AH
CC
     gene, and comprises performing a restriction fragment length polymorphism
CC
     analysis and differentiating between wild-type and mutant alleles on the
     basis of the number of restriction sites. The method is useful for
CC
CC
     diagnosis of inherited PAF-AH deficiency, which has been correlated with
CC
     severe respiratory symptoms in asthmatic children. Recombinant PAF-AH can
CC
     be used to treat inflammatory conditions. (Updated on 25-MAR-2003 to
CC
     correct PF field.)
XX
SQ
     Sequence 11 AA;
  Query Match
                          27.3%; Score 3; DB 2; Length 11;
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
  Matches
             3: Conservative
            6 MKP 8
Qу
              111
            1 MKP 3
Db
```

RESULT 64
AAW11150
ID AAW11150 standard; peptide; 11 AA.

```
XX
AC
    AAW11150;
XX
DT
     10-JUN-1997
                 (first entry)
XX
    CD4 peptide capable of binding HIV gp120 to inactivate HIV.
DE
XX
     HIV; human immunodeficiency virus; gp120; glycoprotein 120; AIDS;
KW
     acquired immune deficiency syndrome; inhibit transmission.
KW
XX
OS
     Synthetic.
XX
PN
     US5603933-A.
XX
     18-FEB-1997.
PD
XX
                    93US-00115171.
PF
     31-AUG-1993;
XX
     31-AUG-1993;
                    93US-00115171.
PR
XX
PA
     (TEXA ) UNIV TEXAS.
XX
     Sastry JK, Dwyer VA, Arlinghaus RB, Nehete PN;
PI
XX
     WPI; 1997-144820/13.
DR
XX
     Compsn. comprising CD4 peptide capable of binding to HIV gp120 - for
PT
     protection against HIV infection.
PT
XX
PS
     Claim 7; Col 30; 20pp; English.
XX
     AAW11147-W11150 are CD4 peptides that bind to HIV gp120 and inactivate
CC
CC
     the virus. The peptides can be dispersed in a suitable vehicle to provide
CC
     compositions useful for protecting human CD4+ cells, e.g. T cells, from
     HIV infection, e.g. to inhibit transmission of HIV during sexual contact.
CC
CC
     They could also be used in e.g. surgical gloves and liquid soap in
CC
     hospitals to prevent HIV transmission. Alternatively, the peptides in the
CC
     composition may be attached to solid supports, e.g. disposable filters,
     for inactivating HIV in blood and other body fluid samples
CC
XX
SQ
     Sequence 11 AA;
 Query Match
                          27.3%; Score 3; DB 2; Length 11;
                          100.0%;
                                   Pred. No. 8.3e+03;
  Best Local Similarity
                                 0; Mismatches
                                                                               0;
 Matches
             3; Conservative
                                                    0;
                                                       Indels
                                                                      Gaps
            9 RRS 11
Qу
              IIII
Db
            8 RRS 10
RESULT 65
     AAW39790 standard; protein; 11 AA.
XX
AC
     AAW39790;
XX
```

```
DT
     11-JUN-1998 (first entry)
XX
DΕ
     Mammalian HMG-Yc repeated AT hook.
XX
     Palindromic element binding factor; PABF; tobacco; cis-acting element;
ΚW
     transcription enhancer; heterologous promoter; AATT repeat element;
KW
     transcription factor; AT hook; HMG I/Y protein.
KW
XX
OS
     Mammalia.
XX
     WO9749727-A1.
PN
XX
PD
     31-DEC-1997.
XX
     27-JUN-1997;
                    97WO-US011156.
PF
XX
     27-JUN-1996;
                    96US-00669721.
PR
XX
     (SALK ) SALK INST BIOLOGICAL STUDIES.
PA
XX
PI
     Lamb CJ, Doerner P, Laible G;
XX
DR
     WPI; 1998-077110/07.
XX
     New isolated enhancer and transcription factor - used for increasing the
PT
     recombinant expression of proteins, particularly in plants, e.g. for
PT
PT
     increasing production or providing pest resistance.
XX
PS
     Disclosure; Fig 7B; 65pp; English.
XX
     AAW39790-W39796 are AT hook motifs used in the characterisation of a
CC
     novel tobacco palindromic element binding factor, (PABF). This PABF binds
CC
     to the sequence (AATT)n where n at least 2. The (AATT)n sequence has cis-
CC
     acting, non-specific enhancer activity. It can be linked to a
CC
     heterologous promoter operably linked with a gene to increase expression
CC
     of the gene in a cell, particularly in plants. It can provide for
CC
     increased expression of proteins such as nutritionally important
CC
CC
     proteins, growth promoting factors, proteins for early flowering in
     plants, proteins giving protection to the plant under certain
CC
     environmental conditions, e.g. proteins conferring resistance to metals
CC
     or other toxic substances, such as herbicides or pesticides, stress-
CC
     related proteins which confer tolerance to temperature extremes, proteins
CC
     conferring resistance to fungi, bacteria, viruses, insects and nematodes,
CC
     proteins of specific commercial value, e.g. enzymes involved in metabolic
CC
     pathways, such as EPSP synthase. The PABF polypeptides act as
CC
CC
     transcription factor and bind to the (AATT) repeat element to further
     boost the activity of the enhancer
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 8.3e+03;
                               0; Mismatches
                                                  0; Indels
                                                                              0;
  Matches
            3; Conservative
            7 KPR 9
Qу
              111
            4 KPR 6
Db
```

```
RESULT 66
AAW66283
     AAW66283 standard; peptide; 11 AA.
XX
AC
     AAW66283;
XX
DT
     23-NOV-1998 (first entry)
XX
     SMR1 peptide useful in treating mineral imbalance associated diseases.
DE
XX
     mineral ion imbalance; submandibular rat protein 1; SMR1; osteoporosis;
KW
KW
     pancreatitis; nephrolithiasis.
XX
     Synthetic.
OS
OS
     Rattus sp.
XX
                     Location/Qualifiers
FH
     Misc-difference 1. .11
FT
                     /note= "Optionally one or more amino acids are in the D-
FT
FT
                     form"
ΧX
     WO9837100-A2.
PN
XX
     27-AUG-1998.
PD
XX
     19-FEB-1998;
                    98WO-EP000956.
PF
XX
                    97US-00801405.
PR
     20-FEB-1997;
XX
     (INSP ) INST PASTEUR.
PA
XX
PI
     Rougeot C, Rougeon F;
XX
     WPI; 1998-480790/41.
DR
XX
     Treating disease associated with mineral imbalance using submandibular
PT
     rat 1 protein - or its derivatives, e.g. osteoporosis, pancreatitis,
PΤ
     nephrolithiasis etc., also related ligands and receptor complexes.
PT
XX
     Claim 3 and 4; Page 79; 111pp; English.
PS
XX
     The invention relates to a method for treating or preventing diseases
CC
     caused by a mineral ion imbalance. The method comprises administration of
CC
     submandibular rat (SMR)1 protein, its maturation products and
CC
     biologically active derivatives. These therapeutic compounds are used to
CC
     control mineral imbalances in kidney, bone, dental enamel or ivory,
CC
     intestine, pancreas, glandular gastric mucosa and parathyroid, e.g. hyper
CC
     - or hypo-parathyroidism, osteoporosis, pancreatitis, submandibular gland
CC
     lithiasis, nephrolithiasis and osteodystrophy. The present sequence
CC
     represents a preferred SMR1 maturation product which can be used in the
CC
CC
     method
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
```

```
Best Local Similarity 100.0%; Pred. No. 8.3e+03;
                               0; Mismatches
                                                    0;
             3; Conservative
                                                       Indels
                                                                  0; Gaps
                                                                               0;
 Matches
            8 PRR 10
Qy
              111 .
            4 PRR 6
Db
RESULT 67
AAW53849
    AAW53849 standard; peptide; 11 AA.
XX
AC
    AAW53849;
XX
     09-JUL-1998
                  (first entry)
DT
XX
     Protein kinase substrate, peptide 2.
DE
XX
     Protein kinase substrate; kinase activity detection.
KW
XX
OS
     Synthetic.
XX
FH
                     Location/Qualifiers
     Key
FT
     Modified-site
                     /note= "N-terminal Biotin"
FT
XX
PN
     WO9809169-A1.
XX
PD
     05-MAR-1998.
XX
PF
     26-AUG-1997;
                    97WO-US015023.
XX
     26-AUG-1996;
                    96US-00702970.
PR
XX
     (TULA-) TULARIK INC.
PA
XX
PΙ
     Strulovici B;
XX
     WPI; 1998-179583/16.
DR
XX
     Determining kinase activity without radioactive reagents - by using
PT
PT
     kinase to introduce phosphorylation-dependent tag into substrate and
PT
     detecting this with receptor, after immobilisation through a separate
PT
     tag.
XX
PS
     Disclosure; Page 8; 28pp; English.
XX
     This sequence represents a protein kinase substrate used in the method of
CC
CC
     the invention. The method is for determining kinase activity, and
CC
     comprises: (i) incubating a solution containing kinase, first receptor
     (R1), nucleotide triphosphate (NTP) and kinase substrate containing a
CC
     first phosphorylation-independent tag and acquiring a second
CC
     phosphorylation-dependent tag during incubation; (ii) incubating so that
CC
     R1 immobilises the product on a solid support by binding specifically to
CC
     one tag; (iii) washing the support; (iv) treating the immobilised product
CC
     with a second receptor (R2) that binds specifically to the unreacted tag;
CC
     and (v) washing again and detecting R2 to indicate presence of
CC
```

```
phosphorylation and thus of kinase activity. The method can be used to
CC
     detect kinase activity as such, or to screen compounds for modulation of
CC
     kinase activity. Kinase activity is determined without use of
CC
     radioactivity and all reagents used are storage stable. The method
CC
CC
     combines rapidity of solution phase reactions and the efficiency and
     adaptability to high throughput screening of solid phase processes. Assay
CC
     is fast (2-3 hours), simple to do (all steps in a single vessel) and very
CC
     sensitive. Also it produces a signal that correlates with ATP (adenosine
CC
     triphosphate) concentration, allowing assays to be performed at high,
CC
     nearly physiological, ATP levels
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                                 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
 Matches
             3; Conservative
            9 RRS 11
Qy
              \mathbf{I}
            9 RRS 11
Db
RESULT 68
AAW38368
     AAW38368 standard; protein; 11 AA.
ΙD
XX
AC
     AAW38368;
XX
DT
     31-MAR-1998 (first entry)
XX
     Human plasma PAF-AH amino-terminal fragment.
DE
XX
     Human; plasma platelet activating factor acetylhydrolase;
KW
KW
     monoclonal antibody; immunoassay; diagnosis; asthma; PAF-AH; detection;
KW
     amino-terminal.
XX
     Homo sapiens.
OS
XX
     US5698403-A.
PN
XX
ΡĎ
     16-DEC-1997.
XX
PF
     07-JUN-1995;
                    95US-00483140.
XX
     06-OCT-1993;
                    93US-00133803.
PR
     06-OCT-1994;
                    94US-00318905.
PR
XX
     (ICOS-) ICOS CORP.
PΑ
XX
     Gray P, Trong HL, Tjoelker LW, Cousens LS, Wilder CL;
PΙ
PI
     Eberhardt CD;
XX
     WPI; 1998-051484/05.
DR
XX
PT
     Immunoassay for platelet activating factor acetyl:hydrolase, PAF-AH -
PT
     useful to diagnose disorders associated with abnormal PAF-AH level.
XX
```

```
Example 2; Col 33-34; 47pp; English.
PS
XX
     The present sequence was used in the development of a method for
CC
     detecting human, mouse, canine, rat and monkey plasma platelet activating
CC
CC
     factor acetylhydrolases (PAF-AH). The method comprises contacting serum
     with PAF-AH specific monoclonal antibody (MAb) to form a PAF-AH/MAb
CC
     complex, and detecting the complex. The method can be used to diagnose
CC
     disorders associated with abnormal PAF-AH levels, and to monitor therapy
CC
     of such disorders. Plasma PAF-AH deficiency has been correlated with
CC
     severe respiratory symptoms in asthmatic children who appear to have
CC
     inherited the deficiency in an autosomal recessive manner
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
                               0; Mismatches
             3; Conservative
                                                       Indels
                                                                  0; Gaps
                                                                              0;
 Matches
                                                   0:
            6 MKP 8
Qy
              III
            1 MKP 3
Db
RESULT 69
AAY30260
     AAY30260 standard; peptide; 11 AA.
XX
AC
     AAY30260;
XX
DT
     23-NOV-1999
                 (first entry)
XX
DΕ
     KDR/Flk-1 targeting peptide RP824.
XX
KW
     Angiogenesis; tumour; metastasis; wound healing; diabetic retinopathy;
KW
     rheumatoid arthritis; psoriasis; cancer; KDR; kinase domain receptor;
     vascular endothelial growth factor receptor; VEGF; Flk-1; blood supply;
KW
KW
     imaging; treatment.
XX
OS
     Synthetic.
XX
FΗ
                     Location/Qualifiers
     Key
FT
     Modified-site
FT
                     /note= "Lys optionally has the sequence DmGSCG or DmGCSG
                     attached to the side chain, where DmG = Dimethylglycine;
FT
                     Lys is a D form residue"
FT
XX
PN
     W09940947-A2.
XX
PD
     19-AUG-1999.
XX
                    99WO-CA000101.
PF
     11-FEB-1999;
XX
     11-FEB-1998;
                    98US-0074420P.
PR
XX
PA
     (RESO-) RESOLUTION PHARM INC.
XX
PΙ
     Fauconnier T, Pollak A, Thornback J, Eshima D;
```

```
WPI; 1999-527342/44.
DR
XX
     Angiogenesis targeting molecules, for, e.g. detecting and treating
PT
PT
     cancer.
XX
PS
     Example 2; Page 33; 70pp; English.
XX
     Sequences AAY30241-Y30273 are peptides that target the Kinase Domain
CC
     Receptor (KDR) murine homologue Flk-1. KDR is a high affinity receptor
CC
     for vascular endothelial growth factor (VEGF) found on endothelial cells.
CC
CC
     VEGF has been shown to induce angiogenesis, which is the process involved
     in creating a blood supply to a tumour. The peptides are used in a
CC
     compound that binds to sites of angiogenesis. The compound consists of a
CC
     chelator moiety capable of complexing a radionuclide metal or a moiety
CC
     capable of binding to a halogen group, and an angiogenesis targeting
CC
    molecule. The peptides are incorporated in the angiogenesis targeting
CC
    molecule. The compounds are used for imaging and treating angiogenesis,
CC
     and also to detect, stage and treat tumours and metastases. Angiogenesis
CC
CC
     is also required for wound healing and conditions such as diabetic
     retinopathy, rheumatoid arthritis and psoriasis, therefore the compounds
CC
    may also be useful in the treatment of these conditions
CC
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%;
                                   Pred. No. 8.3e+03;
  Best Local Similarity
                               0; Mismatches
                                                       Indels
                                                                  0;
                                                                      Gaps
                                                                              0;
 Matches
             3; Conservative
                                                    0;
            7 KPR 9
Qy
              I \mid I \mid
            5 KPR 7
Db
RESULT 70
AAY30265
     AAY30265 standard; peptide; 11 AA.
XX
AC
    AAY30265;
XX
DT
     23-NOV-1999
                 (first entry)
XX
DE
     KDR/Flk-1 targeting peptide RP849.
XX
KW
     Angiogenesis; tumour; metastasis; wound healing; diabetic retinopathy;
KW
     rheumatoid arthritis; psoriasis; cancer; KDR; kinase domain receptor;
KW
     vascular endothelial growth factor receptor; VEGF; Flk-1; blood supply;
KW
     imaging; treatment.
XX
OS
     Synthetic.
XX
                     Location/Qualifiers
FH
     Kev
FT
     Modified-site
FT
                     /note= "Beta alanine"
FT
     Modified-site
FT
                     /note= "Lys has the sequence IYEI attached to the side
FT
                     chain"
```

XX

```
XX
     WO9940947-A2.
ΡN
XX
PD
     19-AUG-1999.
XX
     11-FEB-1999;
                    99WO-CA000101.
PF
XX
                    98US-0074420P.
PR
     11-FEB-1998;
XX
     (RESO-) RESOLUTION PHARM INC.
PΑ
XX
     Fauconnier T, Pollak A, Thornback J, Eshima D;
PΙ
XX
     WPI; 1999-527342/44.
DR
XX
     Angiogenesis targeting molecules, for, e.g. detecting and treating
PT
РΤ
     cancer.
XX
     Example 2; Page 33; 70pp; English.
PS
XX
     Sequences AAY30241-Y30273 are peptides that target the Kinase Domain
CC
     Receptor (KDR) murine homologue Flk-1. KDR is a high affinity receptor
CC
     for vascular endothelial growth factor (VEGF) found on endothelial cells.
CC
     VEGF has been shown to induce angiogenesis, which is the process involved
CC
     in creating a blood supply to a tumour. The peptides are used in a
CC
     compound that binds to sites of angiogenesis. The compound consists of a
CC
CC
     chelator moiety capable of complexing a radionuclide metal or a moiety
CC
     capable of binding to a halogen group, and an angiogenesis targeting
     molecule. The peptides are incorporated in the angiogenesis targeting
CC
CC
     molecule. The compounds are used for imaging and treating angiogenesis,
    and also to detect, stage and treat tumours and metastases. Angiogenesis
CC
CC
     is also required for wound healing and conditions such as diabetic
     retinopathy, rheumatoid arthritis and psoriasis, therefore the compounds
CC
     may also be useful in the treatment of these conditions
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
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             3; Conservative
                                                  0; Indels
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Qу
              +111
Db
            2 KPR 4
RESULT 71
AAW96333
     AAW96333 standard; peptide; 11 AA.
ID
XX
AC
     AAW96333;
XX
     28-JUN-1999 (first entry)
DT
XX
DE
     Human erythrocyte cytoplasmic PAF-AH N-terminal peptide.
XX
     Plasma platelet activating factor acetylhydrolase; PAF-AH; PAF;
KW
```

platelet activating factor; inflammation; treatment; hydrolysis; KW augmentation; pleurisy; asthma; rhinitis; necrotizing enterocolitis; KW acute respiratory distress syndrome; pancreatitis; PCR primer; KW neurological disease; HIV; human immunodeficiency virus. KW XX OS Homo sapiens. XX WO9909147-A1. PNXX PD25-FEB-1999. XX 97WO-US014212. PF13-AUG-1997; XX 97WO-US014212. PR 13-AUG-1997; XX (ICOS-) ICOS CORP. PA XX Eberhardt CD, Gray P, Trong HL, Tjoelker LW; PICousens LS, PΙ Wilder CL; XX WPI; 1999-181028/15. DR XX New truncated human platelet-activating factor acetylhydrolase and its PTencoding polynucleotides - useful for regulating inflammatory events. PTXX Example 2; Page 23; 136pp; English. PS XX When trying to isolate the human plasma platelet-activating factor CC acetylhydrolase (PAF-AH) sequence, two candidate protein sequences for CC PAF-AH were isolated, both of 44kDA. N-terminal analyses of these CC proteins showed that one of them was human serum albumin. The other N-CC terminal peptide (AAW96332) was was not matched on any databases CC searched. It differed from the N-terminal sequence of erythrocyte CC cytoplasmic PAF-AH and was thus used to generate a degenerate primer CC (AAX08485) used to screen a macrophage library for the plasma PAF-AH CCsequence. PAF-AH can be used to inactivate the pathological effects of CC PAF. Pathological conditions which can be treated include pleurisy, CCasthma, rhinitis, necrotizing enterocolitis, acute respiratory distress CC syndrome, acute pancreatitis or neurological disease associated with HIV CC infection. Identification and isolation of polynucleotide sequences CCencoding human plasma PAF-AH allows the recombinant production of PAF-AH. CC This makes possible the use of exogenous PAF-AH to mimic or augment CC normal processes of resolution of inflammation in vivo. PAF inactivation CCoccurs by hydrolysis of the PAF sn-2 acetyl group by PAF-AH. PAF-AH also CC metabolises oxidatively fragmented phospholipids such as products of the CC arachidonic acid cascade which mediate inflammation. Administration of CC PAF-AH is advantageous to administering PAF receptor antagonists since CC PAF-AH is a product normally found in plasma. Because PAF receptor CC antagonists are structurally related to PAF they competitively inhibit CC native PAF-AH activity. Treatment with recombinant PAF-AH would augment CC endogenous PAF-AH actitivity and compensate for any inactivated CCCC endogenous enzyme XX Sequence 11 AA; SQ

27.3%; Score 3; DB 2; Length 11;

Best Local Similarity 100.0%; Pred. No. 8.3e+03;

Query Match

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                                                                  0; Gaps
                                                                               0;
  Matches
             3: Conservative
            6 MKP 8
Qу
              IIII
            1 MKP 3
Db
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AAY30081
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XX
AC
     AAY30081;
XX
     11-OCT-1999 (first entry)
DT
XX
     A complement activity inhibiting peptide.
DE
XX
     Complement activity; complement component C1; activation; inhibition;
KW
     hemolysis; multiple peptide antigen.
KW
XX
OS
     Synthetic.
XX
PN
     JP11199599-A.
XX
PD
     27-JUL-1999.
XX
PF
     09-DEC-1997;
                    97JP-00338964.
XX
PR
     09-DEC-1997;
                    97JP-00338964.
XX
     (DCAR/) DEL CARPIO C A.
PA
     (KOJI/) KOJIMA H.
PΑ
PΑ
     (KOBA/) KOBAYASHI M.
     (AZUM/) AZUMA N.
PΑ
XX
DR
     WPI; 1999-474074/40.
XX
     A complement activity inhibiting peptide and an anti-complementary agent
PT
     - useful for inhibiting e.g. hemolysis.
PT
XX
PS
     Claim 1; Page 2; 8pp; Japanese.
XX
     The present sequence represents a a complement activity inhibiting
CC
     peptide. The peptide can be used to make a diploid (two units connected
CC
     to each other through free Lys), a tetrapoid (two diploids), an octapoid
CC
CC
     (two tetrapoids) and a hexadecapoid (two octapoids). The peptide combines
     to the complement component C1 to inhibit its activation. The peptide is
CC
     used, for example, for inhibiting hemolysis
CC
XX
SQ
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
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                                                                  0; Gaps
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  Matches
             3; Conservative
            7 KPR 9
Qу
              \Pi\Pi
```

RESULT 73 AAY45419 AAY45419 standard; peptide; 11 AA. ID XXAC AAY45419; XX (first entry) DT01-DEC-1999 XX Immunogenic peptide having a human leukocyte antigen binding motif #30. DE XX Human leukocyte antigen; binding; immunogenic; glycoprotein; MHC; HLA; KW immune response; T cell activation; major histocompatibility complex; KW cytotoxic T lymphocyte; CTL; tumour rejection; viral infection; cancer; KW prostate cancer; hepatitis B; hepatitis C; AIDS; renal carcinoma; KW vaccine; immunisation. KW XX OS Synthetic. Homo sapiens. OS XX PNWO9945954-A1. XX PD16-SEP-1999. XX PF13-MAR-1998; 98WO-US005039. XX PR 13-MAR-1998; 98WO-US005039. XX (EPIM-) EPIMMUNE INC. PΑ XX Sette A, Kubo RT, Sidney J, Celis E, Grey HM, Southwood S; PΙ XX WPI; 1999-551214/46. DR XX New immunogenic peptides with HLA binding motif, useful in treatment and PTPTdiagnosis of cancers and viral diseases. XX Claim 1; Page 28; 150pp; English. PS XX AAY45390 to AAY48214 represent specifically claimed immunogenic peptides CC having a human major histocompatibility complex (MHC) Class I (also known CCas human leukocyte antigen (HLA)) binding motif. The immunogenic peptides CC can bind to a specific HLA allele (i.e. HLA-A subtypes HLA-A2.1, A1, A3.2 CC or A24.1 or HLA-B or C) and induce a cytotoxic T cell response against CC the antigen from which the peptide is derived. Cytotoxic T lymphocytes CC (CTLs) which destroy antigen-bearing cells are normally induced by an CC antigen in the form of a peptide fragment bound to a HLA molecule, rather CC than the intact foreign antigen itself, and are particularly important in CC tumour rejection and in fighting viral infections. The peptides are CC therefore useful therapeutically to treat or prevent viral infections and CC cancers in mammals (especially humans) e.g. prostate cancer, hepatitis B CCand C, AIDS, and renal carcinoma. They can be administered as vaccines to CCelicit an immune response in individuals susceptible or otherwise at risk CCCC of viral infection or cancer, or used to treat chronic or acute conditions. They are also useful diagnostically, and can be used to CC

```
induce a cytotoxic T cell response, by contacting a cytotoxic T cell with
CC
     the peptide e.g. to produce CTLs ex vivo for infusion back into a
CC
     patient. The polynucleotides encoding the immunogenic peptides are also
CC
     useful therapeutically and for immunisation as above
CC
XX
     Sequence 11 AA;
SQ
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
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  Best Local Similarity
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Qy
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            5 PRR 7
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ID
XX
AC
     AAY42687;
XX
DT
     17-JAN-2000 (first entry)
XX
     HHV-6 variant B derived peptide epitope.
DE
XX
KW
     Human herpes virus-6; HHV-6; infection; immunological; MIEP; epitope;
KW
     major immediate early protein.
XX
OS
     Synthetic.
OS
     Human herpesvirus 6.
XX
     WO9949086-A1.
PN
XX
PD
     30-SEP-1999.
XX
     26-MAR-1999;
                    99WO-US006921.
PF
XX
     26-MAR-1998;
                    98US-0079379P.
PR
PR
     23-MAR-1999;
                    99US-00274938.
XX
PA
     (CARR/) CARRIGAN D R.
     (KEHL/) KEHL K K.
PΑ
XX
     Carrigan DR, Kehl KK;
PI
XX
     WPI; 1999-601224/51.
DR
XX
     Methods for the rapid detection of human herpes virus 6 variants A and B
PT
PT
     utilizing antibodies raised against synthetic peptides.
XX
PS
     Claim 17; Page 42; 58pp; English.
XX.
     The invention relates to a method for detecting human herpes virus (HHV)-
CC
     6 infection that comprises contacting host cells with immunological
CC
CC
     reagents specific for an epitope of HHV-6 variant A and/or B major
     immediate early protein (MIEP). HHV-6 peptides for raising an
CC
```

```
variant A and not B MIEP; or (b) HHV-6 variant A and B MIEP are also
CC
    provided. The peptides are useful as immunological reagents, e.g.
CC
     hyperimmune sera. Monoclonal antibodies and recombinant DNA-derived
CC
     single chain fragment variables (ScFv) may be useful for detecting HHV-6
CC
     infection when raised against specific epitopes of the HHV-6 MIEP. The
CC
     methods provide a rapid culture procedure having a high level of
CC
     sensitivity and specificity. The methods also have shortened turnaround
CC
     time (compared to other known methods, e.g. the isolation of the virus in
CC
     cell culture, the detection of virus DNA in an acellular specimen by PCR
CC
     or positive immunohistochemical staining) and can be easily implemented
CC
CC
     by a diagnostic laboratory
XX
SO
     Sequence 11 AA;
                          27.3%; Score 3; DB 2; Length 11;
 Query Match
                          100.0%; Pred. No. 8.3e+03;
  Best Local Similarity
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                                                   0; Indels
                                                                 0; Gaps
          3; Conservative
            7 KPR 9
Qу
              9 KPR 11
Db
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XX
AC
    AAW73368;
XX
                  (first entry)
DT
     12-FEB-1999
XX
DE
     Human PAF-AH protein fragment.
XX
     Platelet-activating factor acetylhydrolase; PAF-AH; human; antibody.
KW
XX
OS
     Homo sapiens.
XX
PN
     US5847088-A.
XX
     08-DEC-1998.
PD
XX
                    95US-00485938.
PF
     07-JUN-1995;
XX
     06-OCT-1993;
                    93US-00133803.
PR
     06-OCT-1994;
                    94US-00318905.
PR
XX
     (ICOS-) ICOS CORP.
PA
XX
     Wilder CL, Tjoelker LW, Gray P, Eberhardt CD, Cousens LS;
PI
PI
     Trong HL;
XX
     WPI; 1999-059148/05.
DR
XX
     Antibodies specific for platelet-activating factor acetylhydrolase
PT
PT
     proteins - useful for detecting or purifying the proteins.
XX
```

immunological reagent that binds specifically to an epitope of: (a) HHV-6

CC

```
Example 2; Col 12; 59pp; English.
PS
XX
    This sequence represents a fragment of the human platelet-activating
CC
    factor acetylhydrolase (PAF-AH). This protein is specifically bound by
CC
    the antibody of the invention. The monoclonal antibody of the invention
CC
    is useful for detecting or purifying PAF-AH proteins
CC
XX
SQ
    Sequence 11 AA;
                         27.3%; Score 3; DB 2; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 8.3e+03;
           3; Conservative 0; Mismatches
                                                                           0;
 Matches
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           6 MKP 8
Qу
             \Box
           1 MKP 3
Db
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Search completed: April 8, 2004, 15:39:58
Job time: 46.3077 secs

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OM protein - protein search, using sw model

Run on: April 8, 2004, 15:30:08; Search time 11.3077 Seconds

(without alignments)

50.221 Million cell updates/sec

Title: US-09-787-443A-12

Perfect score: 11

Sequence: 1 ARQKTMKPRRS 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 389414 segs, 51625971 residues

Word size:

Total number of hits satisfying chosen parameters: 8542

Minimum DB seq length: 11 Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Database: Issued Patents AA:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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6	3	27.3	11	1	US-08-197-795-5	Sequence 5, Appli
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75	3	27.3	11	4	US-09-129-192C-35	_	35, Appl
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87	3	27.3	11	4	US-09-630-250B-15	-	15, Appl
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90	3	27.3	11	4	US-09-535-852-469	-	469, App
91	3	27.3	11	4	US-09-535-852-514	-	514, App
92	3	27.3	11	4	US-09-535-852-559	-	559, App
93	3	27.3	11	4	US-09-535-852-604	-	604, App
94	3	27.3	11	4	US-09-535-852-2001	•	2001, Ap
95	3	27.3	11	4	US-09-775-052A-4	_	4, Appli
96	3	27.3	11	4	US-09-775-052A-40	<u>-</u>	40, Appl
97	3	27.3	11	4	US-09-775-052A-55	-	55, Appl
98	3	27.3	11	4	US-09-775-052A-56		56, Appl
99	3	27.3	11	4	US-09-775-052A-57	_	57, Appl
100	3	27.3	11	4	US-09-344-525-3	-	3, Appli

ALIGNMENTS

RESULT 1

US-09-528-200-172

- ; Sequence 172, Application US/09528200
- ; Patent No. 6630570
- ; GENERAL INFORMATION:
- ; APPLICANT: LICHA, KAI
- ; APPLICANT: BECKER, ANDREAS
- ; APPLICANT: SEMMLER, WOLFHARD
- ; APPLICANT: WEIDENMANN, BERTRAM
- ; APPLICANT: HESSNIUS, CARTSEN
- ; APPLICANT: VOLKMER-ENGERT, RUDOLF
- ; APPLICANT: SCHNEIDER-MERGENER, JENS
- : APPLICANT: BHARGAVA, SARAH
- ; TITLE OF INVENTION: SHORT-CHAIN PEPTIDE-DYE CONJUGATES AS CONTRAST MEDIA
- ; TITLE OF INVENTION: FOR OPTICAL DIAGNOSIS
- ; FILE REFERENCE: SCH-1731
- ; CURRENT APPLICATION NUMBER: US/09/528,200
- ; CURRENT FILING DATE: 2000-03-17
- ; PRIOR APPLICATION NUMBER: DE 199 17 713.9
- ; PRIOR FILING DATE: 1999-09-04

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NUMBER OF SEQ ID NOS: 196
 SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 172
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
   OTHER INFORMATION: peptide
US-09-528-200-172
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Qy
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            6 KPRR 9
Db
RESULT 2
US-07-666-719-18
; Sequence 18, Application US/07666719
; Patent No. 5247067
  GENERAL INFORMATION:
     APPLICANT: ARIMA, Terukatsu
     APPLICANT: YAMADA, Kyoko
     APPLICANT: HATANAKA, Tadashi
    APPLICANT: NAMBA, Toshihiko
    APPLICANT: TSUJI, Masao
    TITLE OF INVENTION: PEPTIDE AND ITS USE
    NUMBER OF SEQUENCES: 23
    CORRESPONDENCE ADDRESS:
       ADDRESSEE: OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT
;
       STREET: 1755 Jefferson Davis Highway, Fourth Floor
      CITY: Arlington
       STATE: Virginia
       COUNTRY: US
       ZIP: 22202
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
;
       SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/07/666,719
       FILING DATE: 19910422
       CLASSIFICATION: 530
     ATTORNEY/AGENT INFORMATION:
      NAME: Oblon, No. 5247067man F.
       REGISTRATION NUMBER: 24,618
;
      REFERENCE/DOCKET NUMBER:
                                363-264-0X
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (703)521-5940
       TELEFAX: (703) 486-2347
       TELEX: 248855 OPAT UR
  INFORMATION FOR SEQ ID NO: 18:
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SEQUENCE CHARACTERISTICS:
;
      LENGTH: 11 amino acids
      TYPE: AMINO ACID
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-07-666-719-18
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 Best Local Similarity
 Matches
            3; Conservative
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           7 KPR 9
Qу
              111
            9 KPR 11
Db
RESULT 3
US-07-755-161A-9
; Sequence 9, Application US/07755161A
; Patent No. 5304633
  GENERAL INFORMATION:
    APPLICANT: Mamoru TOMITA et al.
    TITLE OF INVENTION: Antimicrobial Peptides and an
    TITLE OF INVENTION: Antimicrobial Agent
    NUMBER OF SEQUENCES: 10
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Wenderoth, Lind & Ponack
      STREET: 805 Fifteenth Street, N.W., #700
      CITY: Washington
      STATE: D.C.
      COUNTRY: U.S.A.
      ZIP: 20005
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette, 5.25 inch, 500Kb
;
      COMPUTER: IBM Compatible
      OPERATING SYSTEM: MS-DOS
       SOFTWARE: DisplayWrite
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/07/755,161A
       FILING DATE: 19910905
       CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
;
       FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: Warren M. Cheek Jr.
       REGISTRATION NUMBER: 33,367
       REFERENCE/DOCKET NUMBER:
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 202-371-8850
;
       TELEFAX: 202-371-8856
       TELEX:
   INFORMATION FOR SEQ ID NO:
     SEOUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
       TYPE: AMINO ACID
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      STRANDEDNESS: single
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TOPOLOGY: linear
     MOLECULE TYPE:
    HYPOTHETICAL:
    ANTI-SENSE:
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      ORGANISM:
       STRAIN:
       INDIVIDUAL ISOLATE:
      DEVELOPMENTAL STAGE:
      HAPLOTYPE:
      TISSUE TYPE:
      CELL TYPE:
      CELL LINE:
      ORGANELLE:
    IMMEDIATE SOURCE:
      LIBRARY:
      CLONE:
    POSITION IN GENOME:
      CHROMOSOME/SEGMENT:
      MAP POSITION:
      UNITS:
    FEATURE:
      NAME/KEY: modified site
       LOCATION:
                  10
      IDENTIFICATION METHOD:
       OTHER INFORMATION: /note= "thiol group of
      OTHER INFORMATION: Cys residue at location 10 connected by disulfide
bond with
       OTHER INFORMATION: thiol group of Cys residue at location 35 of SEQ ID
NO. 8"
    PUBLICATION INFORMATION:
      AUTHORS:
;
      TITLE:
      JOURNAL:
      VOLUME:
      ISSUE:
      PAGES:
      DATE:
      DOCUMENT NUMBER:
      FILING DATE:
       PUBLICATION DATE:
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US-07-755-161A-9
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 Matches
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Qу
              \perp
            4 RRS 6
RESULT 4
US-07-891-174-9
; Sequence 9, Application US/07891174
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; Patent No. 5317084
  GENERAL INFORMATION:
    APPLICANT: Mamoru TOMITA et al.
    TITLE OF INVENTION: Antimicrobial Peptides and an
    TITLE OF INVENTION: Antimicrobial Agent
    NUMBER OF SEQUENCES: 10
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Wenderoth, Lind & Ponack
      STREET: 805 Fifteenth Street, N.W., #700
      CITY: Washington
      STATE: D.C.
      COUNTRY: U.S.A.
      ZIP: 20005
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette, 5.25 inch, 500Kb
      COMPUTER: IBM Compatible
      OPERATING SYSTEM: MS-DOS
;
      SOFTWARE: DisplayWrite
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/07/891,174
      FILING DATE: 29-MAY-1992
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/755,161
      FILING DATE: 05-SEP-1991
    ATTORNEY/AGENT INFORMATION:
      NAME: Warren M. Cheek Jr.
      REGISTRATION NUMBER: 33,367
      REFERENCE/DOCKET NUMBER:
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 202-371-8850
      TELEFAX: 202-371-8856
      TELEX:
  INFORMATION FOR SEQ ID NO: 9:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE:
    HYPOTHETICAL:
    ANTI-SENSE:
    FRAGMENT TYPE:
    ORIGINAL SOURCE:
      ORGANISM:
      STRAIN:
      INDIVIDUAL ISOLATE:
      DEVELOPMENTAL STAGE:
      HAPLOTYPE:
      TISSUE TYPE:
      CELL TYPE:
      CELL LINE:
;
      ORGANELLE:
    IMMEDIATE SOURCE:
      LIBRARY:
      CLONE:
   POSITION IN GENOME:
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CHROMOSOME/SEGMENT:
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      MAP POSITION:
      UNITS:
    FEATURE:
      NAME/KEY: modified site
;
      LOCATION:
                 10
       IDENTIFICATION METHOD:
       OTHER INFORMATION: /note= "thiol group of
      OTHER INFORMATION: Cys residue at location 10 connected by disulfide
bond with
       OTHER INFORMATION: thiol group of Cys residue at location 35 of SEQ ID
NO. 8"
    PUBLICATION INFORMATION:
;
;
      AUTHORS:
       TITLE:
;
      JOURNAL:
      VOLUME:
      ISSUE:
      PAGES:
;
      DATE:
      DOCUMENT NUMBER:
       FILING DATE:
       PUBLICATION DATE:
       RELEVANT RESIDUES IN SEQ ID NO:
US-07-891-174-9
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  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
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                                                                              0;
 Matches
            9 RRS 11
Qу
              111
            4 RRS 6
RESULT 5
US-08-046-538-1
; Sequence 1, Application US/08046538
; Patent No. 5444074
  GENERAL INFORMATION:
    APPLICANT: BAKER, RAYMOND
APPLICANT: LADDUWAHETTY, TAMARA
    APPLICANT: SEWARD, EILEEN M.
     APPLICANT: SWAIN, CHRISTOPHER J.
     TITLE OF INVENTION: AZACYCLIC COMPOUNDS
    NUMBER OF SEQUENCES: 3
    CORRESPONDENCE ADDRESS:
       ADDRESSEE: MERCK & CO., INC.
       STREET: P.O. BOX 2000, 126 E. LINCOLN AVE.
;
       CITY: RAHWAY
       STATE: NJ
       COUNTRY: USA
       ZIP: 07065
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
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SOFTWARE: PatentIn Release #1.0, Version #1.25
;
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/046,538
      FILING DATE: 19930413
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: NORTH, ROBERT J.
;
      REGISTRATION NUMBER: 27,366
;
      REFERENCE/DOCKET NUMBER: T-1157Y
;
     TELECOMMUNICATION INFORMATION:
      TELEPHONE: 908-594-7262
      TELEX: 908-594-4720
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
;
      TYPE: amino acid
;
      STRANDEDNESS: single
;
      TOPOLOGY: linear
    MOLECULE TYPE: protein
US-08-046-538-1
                         27.3%; Score 3; DB 1; Length 11;
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 Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0;
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           7 KPR 9
Qу
             \Box
           9 KPR 11
Db
RESULT 6
US-08-197-795-5
; Sequence 5, Application US/08197795
; Patent No. 5457182
  GENERAL INFORMATION:
    APPLICANT: Wiederrecht, Gregory J.
    APPLICANT: Sewell, Tonya J.
    TITLE OF INVENTION: FK-506 CYTOSOLIC BINDING PROTEIN
    NUMBER OF SEQUENCES: 21
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Merck & Co., Inc.
      STREET: 126 E. Lincoln Avenue
      CITY: Rahway
      STATE: New Jersey
      COUNTRY: USA
      ZIP: 07065
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/197,795
      FILING DATE:
      CLASSIFICATION: 530
    ATTORNEY/AGENT INFORMATION:
     NAME: Thies, J. Eric
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REGISTRATION NUMBER: 35,382
;
      REFERENCE/DOCKET NUMBER: 19181
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (908) 594-3904
      TELEFAX: (908) 594-4720
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: protein
    HYPOTHETICAL: NO
    ANTI-SENSE: NO
US-08-197-795-5
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 Best Local Similarity 100.0%; Pred. No. 1.7e+03;
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                                                                            0;
           2 RQK 4
Qу
             +11
           5 ROK 7
Db
RESULT 7
US-08-128-971B-15
; Sequence 15, Application US/08128971B
; Patent No. 5525503
  GENERAL INFORMATION:
    APPLICANT: Christopher E. Rudd
    APPLICANT: Prasad Kanteti
    TITLE OF INVENTION: SIGNAL TRANSDUCTION VIA CD28
    NUMBER OF SEQUENCES: 21
;
    CORRESPONDENCE ADDRESS:
;
      ADDRESSEE: Fish & Richardson
      STREET: 225 Franklin Street
      CITY: Boston
      STATE: Massachusetts
      COUNTRY: U.S.A.
      ZIP: 02110-2804
    COMPUTER READABLE FORM:
      MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
;
      COMPUTER: IBM PS/2 Model 50Z or 55SX
      OPERATING SYSTEM: MS-DOS (Version 5.0)
      SOFTWARE: WordPerfect (Version 5.1)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/128,971B
      FILING DATE: September 28, 1993
;
      CLASSIFICATION: 800
;
    PRIOR APPLICATION DATA:
;
      APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: Janis K. Fraser
      REGISTRATION NUMBER: 34,819
      REFERENCE/DOCKET NUMBER: 00530/073001
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TELECOMMUNICATION INFORMATION:
;
       TELEPHONE: (617) 542-5070
       TELEFAX: (617) 542-8906
       TELEX: 200154
  INFORMATION FOR SEQ ID NO: 15:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11
       TYPE: amino acid
       STRANDEDNESS:
      TOPOLOGY: linear
US-08-128-971B-15
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Qу
             \perp
            9 PRR 11
Db
RESULT 8
US-08-470-187-3
; Sequence 3, Application US/08470187
; Patent No. 5532152
  GENERAL INFORMATION:
    APPLICANT: Cousens, Lawrence S.
    APPLICANT: Eberhardt, Christine E.
    APPLICANT: Gray, Patrick W.
    APPLICANT: Tjoelker, Larry W.
    APPLICANT: Wilder, Cheryl L.
     TITLE OF INVENTION: Platelet-Activating Factor Acetyl
     TITLE OF INVENTION: Hydrolase
    NUMBER OF SEQUENCES: 11
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Marshall, O'Toole, Gertein, Murray & Borun
      STREET: 6300 Sears Tower, 233 South Wacker Drive
      CITY: Chicago
      STATE: Illinois
      COUNTRY: USA
      ZIP: 60606
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/470,187
       FILING DATE:
      CLASSIFICATION: 435
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: No. 5532152and, Greta E.
      REGISTRATION NUMBER: 35,302
;
      REFERENCE/DOCKET NUMBER: 31672
```

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TELECOMMUNICATION INFORMATION:
;
      TELEPHONE: (312) 474-6300
;
      TELEFAX: (312) 474-0448
      TELEX: 25-3658
   INFORMATION FOR SEQ ID NO: 3:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
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Db
RESULT 9
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; Sequence 3, Application US/08318905
; Patent No. 5641669
  GENERAL INFORMATION:
    APPLICANT: Cousens, Lawrence S.
    APPLICANT: Eberhardt, Christine D.
    APPLICANT: Gray, Patrick W.
    APPLICANT: Le Trong, Hai
    APPLICANT: Tjoelker, Larry W.
    APPLICANT: Wilder, Cheryl L.
    TITLE OF INVENTION: Platelet-Activating Factor Acetyl
    TITLE OF INVENTION: Hydrolase
    NUMBER OF SEQUENCES: 26
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Marshall, O'Toole, Gertein, Murray & Borun
      STREET: 6300 Sears Tower, 233 South Wacker Drive
      CITY: Chicago
      STATE: Illinois
      COUNTRY: USA
      ZIP: 60606
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/318,905
      FILING DATE:
      CLASSIFICATION: 424
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/133,803
      FILING DATE: 6-OCT-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: No. 5641669and, Greta E.
      REGISTRATION NUMBER: 35,302
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```
REFERENCE/DOCKET NUMBER: 32205
;
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (312) 474-6300
       TELEFAX: (312) 474-0448
      TELEX: 25-3658
  INFORMATION FOR SEQ ID NO: 3:
    SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-318-905-3
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 Best Local Similarity 100.0%; Pred. No. 1.7e+03;
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Qу
             111
           1 MKP 3
Db
RESULT 10
US-08-483-232-3
; Sequence 3, Application US/08483232
; Patent No. 5656431
  GENERAL INFORMATION:
    APPLICANT: Cousens, Lawrence S.
    APPLICANT: Eberhardt, Christine D.
;
    APPLICANT: Gray, Patrick W.
    APPLICANT: Le Trong, Hai
    APPLICANT:
                Tjoelker, Larry W.
    APPLICANT: Wilder, Cheryl L.
    TITLE OF INVENTION: Platelet-Activating Factor
    TITLE OF INVENTION: Acetylhydrolase
;
    NUMBER OF SEQUENCES: 30
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
      STREET: 6300 Sears Tower, 233 South Wacker Drive
      CITY: Chicago
      STATE: Illinois
      COUNTRY: United States of America
      ZIP: 60606-6402
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/483,232
      FILING DATE:
;
      CLASSIFICATION: 435
;
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/318,905
      FILING DATE: 06-OCT-1994
;
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/133,803
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FILING DATE: 06-OCT-1993
;
    ATTORNEY/AGENT INFORMATION:
      NAME: No. 5656431and, Greta E.
      REGISTRATION NUMBER: 35,302
      REFERENCE/DOCKET NUMBER: 27866/32689
    TELECOMMUNICATION INFORMATION:
       TELEPHONE: (312) 474-6300
       TELEFAX: (312) 474-0448
       TELEX: 25-3658
   INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-483-232-3
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                              0; Mismatches 0; Indels
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Qу
             \perp \perp \perp
            1 MKP 3
Db
RESULT 11
US-08-256-771-32
; Sequence 32, Application US/08256771
; Patent No. 5656591
  GENERAL INFORMATION:
    APPLICANT: Mamoru TOMITA et al.
    TITLE OF INVENTION: ANTIMICROBIAL AGENTS AND METHOD FOR TREATING
    TITLE OF INVENTION: PRODUCTS THEREWITH
    NUMBER OF SEQUENCES: 32
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Wenderoth, Lind & Ponack
      STREET: 805 Fifteenth Street, N.W., #700
      CITY: Washington
      STATE: D.C.
      COUNTRY: U.S.A.
       ZIP: 20005
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette, 5.25 inch, 500 kb
      COMPUTER: IBM Compatible
      OPERATING SYSTEM: MS-DOS
       SOFTWARE: Wordperfect 5.1
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       FILING DATE: July 22, 1994
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: Warren M. Cheek, Jr.
      REGISTRATION NUMBER: 33,367
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REFERENCE/DOCKET NUMBER:
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;
      TELEPHONE: 202-371-8850
      TELEFAX:
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      TELEX:
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  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
;
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
    FEATURE:
      NAME/KEY:
      LOCATION:
      IDENTIFICATION METHOD:
      OTHER INFORMATION: /note= "Cys at position 10 is linked to
      OTHER INFORMATION: Cys at position 35 of SEQ ID No. 5656591 10 by
disulfide bond"
US-08-256-771-32
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Qу
             \square
            4 RRS 6
Db
RESULT 12
US-08-462-917-10
; Sequence 10, Application US/08462917
; Patent No. 5661008
  GENERAL INFORMATION:
    APPLICANT: ALMSTEDT, Annelie B
    APPLICANT: GRAY (HELLSTROM), Eva Maria
    APPLICANT: LIND, Peter
    APPLICANT: LJUNG, Catherine
                SANDBERG, Helena Inga
    APPLICANT:
                SPIRA, Jack
    APPLICANT:
    APPLICANT:
                SYDOW-BACKMAN, Mona
    APPLICANT: WIMAN, Helena
;
    TITLE OF INVENTION: RECOMBINANT HUMAN FACTOR VIII
    TITLE OF INVENTION: DERIVATIVES
    NUMBER OF SEQUENCES: 10
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Burns, Doane, Swecker & Mathis
      STREET: P.O. Box 1404
      CITY: Alexandria
      STATE: Virginia
      COUNTRY: United States
      ZIP: 22313-1404
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
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SOFTWARE: PatentIn Release #1.0, Version #1.25
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     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/462,917
       FILING DATE:
       CLASSIFICATION: 435
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: US 07/934,495
       FILING DATE: 17-DEC-1992
       APPLICATION NUMBER: SE 9100799-7
       FILING DATE: 15-MAR-1991
    ATTORNEY/AGENT INFORMATION:
      NAME: Crane-Feury, Sharon E
       REGISTRATION NUMBER: 36,113
       REFERENCE/DOCKET NUMBER:
                                 003300-283
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (703) 836-6620
       TELEFAX: (703) 836-2021
   INFORMATION FOR SEQ ID NO: 10:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: single
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    MOLECULE TYPE: DNA (genomic)
US-08-462-917-10
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Qу
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              111
Db
            3 PRR 5
RESULT 13
US-08-483-140-3
; Sequence 3, Application US/08483140
; Patent No. 5698403
  GENERAL INFORMATION:
    APPLICANT: ICOS Corporation
    TITLE OF INVENTION: Platelet-Activating Factor Acetyl TITLE OF INVENTION: Hydrolase
    NUMBER OF SEQUENCES:
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Marshall, O'Toole, Gertein, Murray & Borun
      STREET: 6300 Sears Tower, 233 South Wacker Drive
      CITY: Chicago
      STATE: Illinois
      COUNTRY: USA
      ZIP: 60606
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
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APPLICATION NUMBER: US/08/483,140
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       FILING DATE:
      CLASSIFICATION: 435
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      APPLICATION NUMBER: US 08/318,905
       FILING DATE: 6-OCT-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/133,803
       FILING DATE: 6-OCT-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: No. 5698403and, Greta E.
      REGISTRATION NUMBER: 35,302
      REFERENCE/DOCKET NUMBER:
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (312) 474-6300
      TELEFAX: (312) 474-0448
      TELEX: 25-3658
   INFORMATION FOR SEQ ID NO: 3:
;
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-483-140-3
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 Query Match
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 Matches
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            3; Conservative
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                                                                    Gaps
            6 MKP 8
Qγ
             111
Db
           1 MKP 3
RESULT 14
US-08-323-531-32
; Sequence 32, Application US/08323531
; Patent No. 5731188
  GENERAL INFORMATION:
    APPLICANT: Cochran Ph.D., Mark D
    TITLE OF INVENTION: Recombinant Equine Herpesvirus
    NUMBER OF SEQUENCES:
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: John P. White
      STREET: 30 Rockefeller Plaza
      CITY: New York
      STATE: New York
      COUNTRY: USA
      ZIP: 10112
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/323,531
      FILING DATE:
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CLASSIFICATION: 435
;
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US/07/926,784
;
       FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: White, John P
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (212)977~9550
       TELEFAX: (212)664-0525
       TELEX: 422523
   INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
     MOLECULE TYPE: protein
US-08-323-531-32
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  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
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            8 PRR 10
Qу
              -1.11
            4 PRR 6
Db
RESULT 15
US-08-548-540-145
; Sequence 145, Application US/08548540
; Patent No. 5733731
  GENERAL INFORMATION:
    APPLICANT: Schatz, Peter J.
;
    APPLICANT: Cull, Millard G. APPLICANT: Miller, Jeff F.
    APPLICANT: Stemmer, Willem P.C.
    APPLICANT: Gates, Christian M.
    TITLE OF INVENTION: Peptide Library and Screening Method
    NUMBER OF SEQUENCES: 162
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: William M. Smith
       STREET: One Market Plaza, Steuart Tower, Suite 2000
      CITY: San Francisco
       STATE: California
      COUNTRY: USA
      ZIP: 94105
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/548,540
      FILING DATE: 26-OCT-1995
;
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
     APPLICATION NUMBER: US 08/290,641
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FILING DATE: 15-AUG-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/963,321
      FILING DATE: 15-OCT-1992
    ATTORNEY/AGENT INFORMATION:
      NAME: Smith, William M.
      REGISTRATION NUMBER: 30,223
      REFERENCE/DOCKET NUMBER: 16528J-001240US
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 415-326-2400
      TELEFAX: 415-326-2422
  INFORMATION FOR SEQ ID NO: 145:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-548-540-145
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 Matches
           9 RRS 11
Qy
             +111
           5 RRS 7
RESULT 16
US-08-548-540-160
; Sequence 160, Application US/08548540
; Patent No. 5733731
 GENERAL INFORMATION:
;
    APPLICANT: Schatz, Peter J.
    APPLICANT: Cull, Millard G.
    APPLICANT: Miller, Jeff F.
    APPLICANT: Stemmer, Willem P.C.
    APPLICANT: Gates, Christian M.
    TITLE OF INVENTION: Peptide Library and Screening Method
    NUMBER OF SEQUENCES: 162
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: William M. Smith
      STREET: One Market Plaza, Steuart Tower, Suite 2000
      CITY: San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94105
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
     APPLICATION NUMBER: US/08/548,540
      FILING DATE: 26-OCT-1995
      CLASSIFICATION: 435
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PRIOR APPLICATION DATA:
       APPLICATION NUMBER: US 08/290,641
       FILING DATE: 15-AUG-1994
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/963,321
       FILING DATE: 15-OCT-1992
    ATTORNEY/AGENT INFORMATION:
      NAME: Smith, William M.
       REGISTRATION NUMBER: 30,223
      REFERENCE/DOCKET NUMBER: 16528J-001240US
     TELECOMMUNICATION INFORMATION:
      TELEPHONE: 415-326-2400
      TELEFAX: 415-326-2422
   INFORMATION FOR SEQ ID NO: 160:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-548-540-160
 Query Match
                         27.3%; Score 3; DB 1; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches 0; Indels
 Matches
                                                             0; Gaps
                                                                            0;
           9 RRS 11
Qу
             -111
Db
           5 RRS 7
RESULT 17
US-08-198-094-32
; Sequence 32, Application US/08198094
; Patent No. 5741696
  GENERAL INFORMATION:
    APPLICANT: Cochran Ph.D., Mark D
    TITLE OF INVENTION: Recombinant Equine Herpesvirus
    NUMBER OF SEQUENCES: 77
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: John P. White
      STREET: 30 Rockefeller Plaza
      CITY: New York
      STATE: New York
      COUNTRY: USA
      ZIP: 10112
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/198,094
      FILING DATE: February 17, 1994
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: White, John P
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TELECOMMUNICATION INFORMATION:
       TELEPHONE: (212)977-9550
       TELEFAX: (212) 664-0525
       TELEX: 422523
   INFORMATION FOR SEQ ID NO: 32:
    SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
     MOLECULE TYPE: protein
US-08-198-094-32
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                                                                            0;
            8 PRR 10
Qу
              \mathbf{I}
Db
            4 PRR 6
RESULT 18
US-08-702-970-2
; Sequence 2, Application US/08702970
; Patent No. 5759787
  GENERAL INFORMATION:
    APPLICANT: Strulovici, Berta
     TITLE OF INVENTION: Kinase Assay
    NUMBER OF SEQUENCES: 4
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: Flehr, Hohbach, Test, Albritton & Herbert
      STREET: 4 Embarcadero Center, Suite 3400
      CITY: San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94111
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/702,970
      FILING DATE:
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Brezner, David J
      REGISTRATION NUMBER: 24,7747
      REFERENCE/DOCKET NUMBER: T96-007/64444
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (415) 781-1989
;
      TELEFAX: (415) 398-3249
;
  INFORMATION FOR SEQ ID NO: 2:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: not relevant
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TOPOLOGY: not relevant
     MOLECULE TYPE: peptide
US-08-702-970-2
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  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
            3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
            9 RRS 11
Qγ
              \perp
Db
            9 RRS 11
RESULT 19
US-08-381-984-32
; Sequence 32, Application US/08381984
; Patent No. 5804555
  GENERAL INFORMATION:
     APPLICANT: Mamoru TOMITA et al.
;
     TITLE OF INVENTION: ANTIOXIDANT
    NUMBER OF SEQUENCES: 32
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Wenderoth, Lind & Ponack
       STREET: 805 Fifteenth Street, N.W., #700
       CITY: Washington
       STATE: D.C.
       COUNTRY: U.S.A.
       ZIP: 20005
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette, 3.5 inch, 1.44 mb
      COMPUTER: IBM Compatible
      OPERATING SYSTEM: MS-DOS
      SOFTWARE: Wordperfect 5.1
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/381,984
;
      FILING DATE: April 11, 1995
      CLASSIFICATION: 252
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: Warren M. Cheek, Jr.
      REGISTRATION NUMBER: 33,367
      REFERENCE/DOCKET NUMBER:
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 202-371-8850
      TELEFAX:
      TELEX:
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
;
      STRANDEDNESS: single
;
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
    FEATURE:
      NAME/KEY:
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LOCATION:
       IDENTIFICATION METHOD:
       OTHER INFORMATION: /note= "the specified peptide as well as
       OTHER INFORMATION: peptides including the specified peptide as a
fragment thereof"
     FEATURE:
       NAME/KEY:
       LOCATION:
       IDENTIFICATION METHOD:
       OTHER INFORMATION: /note= "cysteine residues at position 10
       OTHER INFORMATION: is linked by disulfide linkage with the cysteine
residue at pos
       OTHER INFORMATION: SEQ ID No. 5804555 29"
US-08-381-984-32
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                                                      Indels
                                                                 0; Gaps
                                                                             0;
           9 RRS 11
Qу
             111
            4 RRS 6
RESULT 20
US-08-669-721-16
; Sequence 16, Application US/08669721
; Patent No. 5834236
  GENERAL INFORMATION:
     APPLICANT: Lamb et al., Christopher J.
     TITLE OF INVENTION: NOVEL TRANSCRIPTION ENHANCER ELEMENT AND
     TITLE OF INVENTION: TRANSCRIPTION FACTOR AND METHODS OF USE THEREFOR
    NUMBER OF SEQUENCES: 22
    CORRESPONDENCE ADDRESS:
       ADDRESSEE: Fish & Richardson P.C.
       STREET: 4225 Executive Square, Suite 1400
       CITY: La Jolla
       STATE: CA
       COUNTRY: USA
       ZIP: 92037
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/669,721
      FILING DATE: 27-JUN-1996
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Ellison, Eldora L.
      REGISTRATION NUMBER: 39,967
      REFERENCE/DOCKET NUMBER: 07251/014001
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 619/678-5070
      TELEFAX: 619/678-5099
  INFORMATION FOR SEQ ID NO:
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SEQUENCE CHARACTERISTICS:
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       LENGTH: 11 amino acids
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       TYPE: amino acid
       STRANDEDNESS: not relevant
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    MOLECULE TYPE: protein
US-08-669-721-16
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                              0; Mismatches
 Matches
            3; Conservative
                                                   0; Indels
                                                                              0;
                                                                  0; Gaps
            7 KPR 9
Qу
              \perp
            4 KPR 6
Db
RESULT 21
US-08-485-938A-3
; Sequence 3, Application US/08485938A
; Patent No. 5847088
  GENERAL INFORMATION:
    APPLICANT: Cousens, Lawrence S.
    APPLICANT: Eberhardt, Christine D. APPLICANT: Gray, Patrick W.
;
;
    APPLICANT: Le Trong, Hai
    APPLICANT: Tjoelker, Larry W.
    APPLICANT: Wilder, Cheryl L.
    TITLE OF INVENTION: Platelet-Activating Factor
    TITLE OF INVENTION: Acetylhydrolase
    NUMBER OF SEQUENCES: 36
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
       STREET: 6300 Sears Tower, 233 South Wacker Drive
;
      CITY: Chicago
       STATE: Illinois
       COUNTRY: United States of America
       ZIP: 60606-6402
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
;
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/485,938A
       FILING DATE:
       CLASSIFICATION: 435
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/318,905
ï
       FILING DATE: 06-OCT-1994
;
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/133,803
       FILING DATE: 06-OCT-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: No. 5847088and, Greta E.
      REGISTRATION NUMBER: 35,302
;
      REFERENCE/DOCKET NUMBER: 27866/32792
```

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TELECOMMUNICATION INFORMATION:
;
      TELEPHONE: (312) 474-6300
      TELEFAX: (312) 474-0448
      TELEX: 25-3658
  INFORMATION FOR SEQ ID NO: 3:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-485-938A-3
 Query Match
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           3; Conservative 0; Mismatches 0; Indels
 Matches
                                                               0; Gaps
                                                                            0;
           6 MKP 8
             \perp
Db
           1 MKP 3
RESULT 22
US-08-464-182A-11
; Sequence 11, Application US/08464182A
; Patent No. 5849885
  GENERAL INFORMATION:
    APPLICANT: Nuijens, Jan H.
;
    APPLICANT: Van Veen, Harry H.
    TITLE OF INVENTION: Isolation of Lactoferrin from Milk
    NUMBER OF SEQUENCES: 28
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
      STREET: Two Embarcadero Center, 8th Floor
      CITY: San Francisco
      STATE: CA
      COUNTRY: USA
;
      ZIP: 94111
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/464,182A
      FILING DATE: 05-JUN-1995
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/406,271
      FILING DATE: 09-MAR-1995
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/198,321
      FILING DATE: 16-FEB-1994
    ATTORNEY/AGENT INFORMATION:
      NAME: Apple, Randolph T.
      REGISTRATION NUMBER: 36,429
      REFERENCE/DOCKET NUMBER: 016994-004920US
```

```
TELECOMMUNICATION INFORMATION:
;
      TELEPHONE: (650) 326-2400
      TELEFAX: (650) 326-2422
   INFORMATION FOR SEQ ID NO: 11:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: not relevant
      TOPOLOGY: not relevant
    MOLECULE TYPE: peptide
    FEATURE:
      NAME/KEY: Peptide
      LOCATION:
                1..11
      OTHER INFORMATION: /note= "Calbio. peak II"
US-08-464-182A-11
                         27.3%; Score 3; DB 2; Length 11;
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 Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches 0; Indels
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 Matches
           9 RRS 11
Qу
             111
           2 RRS 4
Db
RESULT 23
US-08-464-182A-12
; Sequence 12, Application US/08464182A
; Patent No. 5849885
  GENERAL INFORMATION:
    APPLICANT: Nuijens, Jan H.
    APPLICANT: Van Veen, Harry H.
    TITLE OF INVENTION: Isolation of Lactoferrin from Milk
    NUMBER OF SEQUENCES: 28
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
      STREET: Two Embarcadero Center, 8th Floor
      CITY: San Francisco
      STATE: CA
      COUNTRY: USA
      ZIP: 94111
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/464, 182A
      FILING DATE: 05-JUN-1995
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/406,271
      FILING DATE: 09-MAR-1995
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/198,321
      FILING DATE: 16-FEB-1994
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ATTORNEY/AGENT INFORMATION:
;
      NAME: Apple, Randolph T.
      REGISTRATION NUMBER: 36,429
      REFERENCE/DOCKET NUMBER: 016994-004920US
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (650) 326-2400
      TELEFAX: (650) 326-2422
   INFORMATION FOR SEQ ID NO: 12:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: not relevant
      TOPOLOGY: not relevant
    MOLECULE TYPE: peptide
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      NAME/KEY:
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      LOCATION:
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      OTHER INFORMATION: /note= "Calbio. peak I"
US-08-464-182A-12
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 Matches
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Qу
             1 RRS 3
Db
RESULT 24
US-08-693-274A-3
; Sequence 3, Application US/08693274A
; Patent No. 5861491
   GENERAL INFORMATION:
    APPLICANT: Nuijens, Jan H.
    APPLICANT: Van Veen, Harry H.
    TITLE OF INVENTION: Isolation of Lactoferrin from Milk
    NUMBER OF SEQUENCES: 17
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend and Crew LLP
      STREET: Two Embarcadero Center, Eighth Floor
      CITY: San Francisco
      STATE: California
      COUNTRY: USA
       ZIP: 94111-3834
    COMPUTER READABLE FORM:
;
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      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
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      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/693,274A
      FILING DATE: 16-OCT-1996
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
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      FILING DATE: 05-JUN-1995
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PRIOR APPLICATION DATA:
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      APPLICATION NUMBER: US 08/406,271
       FILING DATE: 09-MAR-1995
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: WO PCT/EP95/00583
       FILING DATE: 16-FEB-1995
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/198,321
       FILING DATE: 16-FEB-1994
    ATTORNEY/AGENT INFORMATION:
      NAME: Apple, Randolph T.
       REGISTRATION NUMBER: 36,429
       REFERENCE/DOCKET NUMBER:
                                016994-004930US
    TELECOMMUNICATION INFORMATION:
       TELEPHONE: (415) 576-0200
       TELEFAX: (415) 576-0300
   INFORMATION FOR SEQ ID NO: 3:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
       STRANDEDNESS:
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    MOLECULE TYPE: peptide
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US-08-693-274A-3
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Qу
             \perp
Db
           2 RRS 4
RESULT 25
US-08-693-274A-4
; Sequence 4, Application US/08693274A
; Patent No. 5861491
  GENERAL INFORMATION:
    APPLICANT: Nuijens, Jan H.
    APPLICANT: Van Veen, Harry H.
    TITLE OF INVENTION: Isolation of Lactoferrin from Milk
    NUMBER OF SEQUENCES: 17
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend and Crew LLP
       STREET: Two Embarcadero Center, Eighth Floor
      CITY: San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94111-3834
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
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OPERATING SYSTEM: PC-DOS/MS-DOS
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       SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
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       FILING DATE: 16-OCT-1996
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/464,182
       FILING DATE: 05-JUN-1995
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    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/406,271
       FILING DATE: 09-MAR-1995
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: WO PCT/EP95/00583
       FILING DATE: 16-FEB-1995
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/198,321
;
       FILING DATE: 16-FEB-1994
    ATTORNEY/AGENT INFORMATION:
      NAME: Apple, Randolph T.
      REGISTRATION NUMBER: 36,429
      REFERENCE/DOCKET NUMBER: 016994-004930US
     TELECOMMUNICATION INFORMATION:
      TELEPHONE: (415) 576-0200
;
       TELEFAX: (415) 576-0300
;
  INFORMATION FOR SEQ ID NO: 4:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
       STRANDEDNESS:
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
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US-08-693-274A-4
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           9 RRS 11
Qy
             \perp
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RESULT 26
US-08-637-759B-211
; Sequence 211, Application US/08637759B
; Patent No. 5876931
  GENERAL INFORMATION:
    APPLICANT: David William Holden
    TITLE OF INVENTION: Identification of Genes
   NUMBER OF SEQUENCES: 501
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Patrea L. Pabst
```

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STREET: 2800 One Atlantic Center
;
       STREET: 1201 West Peachtree Street
       CITY: Atlanta
       STATE: Georgia
       COUNTRY: USA
       ZIP: 30309-3450
    COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
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       APPLICATION NUMBER: US/08/637,759B
       FILING DATE: 03-MAY-1996
       CLASSIFICATION: 435
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/GB95/02875
       FILING DATE: 11-DEC-1995
       CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Pabst, Patrea L.
       REGISTRATION NUMBER: 31,284
      REFERENCE/DOCKET NUMBER: RPMS 101
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (404) 873-8794
;
       TELEFAX: (404) 873-8795
;
   INFORMATION FOR SEQ ID NO: 211:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS: single
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US-08-637-759B-211
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              \Pi\Pi
Db
            4 PRR 6
RESULT 27
US-08-679-865-35
; Sequence 35, Application US/08679865
; Patent No. 5912137
  GENERAL INFORMATION:
     APPLICANT: Tsien, Roger Y.
     APPLICANT: Cubitt, Andrew B.
    TITLE OF INVENTION: Assays for Protein Kinases Using
    TITLE OF INVENTION: Fluorescent Protein Substrates
    NUMBER OF SEQUENCES: 48
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend and Crew LLP
```

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STREET: Two Embarcadero Center, Eighth Floor
;
      CITY: San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94111-3834
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/679,865
      FILING DATE: 16-JUL-1996
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Storella, John S.
      REGISTRATION NUMBER: 32,944
;
      REFERENCE/DOCKET NUMBER: 02307Z-069000
;
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (415) 576-0200
      TELEFAX: (415) 576-0300
  INFORMATION FOR SEQ ID NO: 35:
    SEQUENCE CHARACTERISTICS:
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      LENGTH: 11 amino acids
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      TYPE: amino acid
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      STRANDEDNESS:
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-679-865-35
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             4 RRS 6
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RESULT 28
US-08-727-688-24
; Sequence 24, Application US/08727688
; Patent No. 5919638
 GENERAL INFORMATION:
    APPLICANT: Russell, John C.
    TITLE OF INVENTION: Reagents and Methods for Detecting Prostate Tumors
;
    NUMBER OF SEQUENCES: 36
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Abbott Laboratories
      STREET: 100 Abbott Park Road D377/AP6D
;
      CITY: Abbott Park
;
      STATE: IL
;
      COUNTRY: USA
      ZIP: 60064
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette
      COMPUTER: IBM Compatible
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OPERATING SYSTEM: DOS
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       SOFTWARE: FastSEQ Version 2.0
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/727,688
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      FILING DATE:
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
;
      FILING DATE:
    ATTORNEY/AGENT INFORMATION:
      NAME: Porembski, Priscilla E.
;
      REGISTRATION NUMBER: 33,207
      REFERENCE/DOCKET NUMBER: 5967.US.01
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (847) 937-0378
;
      TELEFAX: (847) 938-2623
;
      TELEX:
   INFORMATION FOR SEQ ID NO: 24:
    SEQUENCE CHARACTERISTICS:
;
      LENGTH: 11 amino acids
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      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
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US-08-727-688-24
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                                                              0; Gaps
                                                                             0;
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Qу
              | | |
           7 PRR 9
RESULT 29
US-08-406-271-11
; Sequence 11, Application US/08406271
; Patent No. 5919913
  GENERAL INFORMATION:
    APPLICANT: Nuyens, Jan H.
;
    APPLICANT: Van Veen, Harry H.
;
    TITLE OF INVENTION: Isolation of Lactoferrin from Milk
    NUMBER OF SEQUENCES: 28
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
       STREET: One Market Plaza, Steuart Street Tower, 20th
      STREET: Floor
      CITY: San Francisco
      STATE: CA
      COUNTRY: USA
       ZIP: 94105
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
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      SOFTWARE: PatentIn Release #1.0, Version #1.30
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      APPLICATION NUMBER: US/08/406,271
      FILING DATE: 09-MAR-1995
      CLASSIFICATION: 530
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/198,321
      FILING DATE: 16-FEB-1994
    ATTORNEY/AGENT INFORMATION:
;
      NAME: Apple, Randolph T.
      REGISTRATION NUMBER: 36,429
;
      REFERENCE/DOCKET NUMBER: 016994-004910
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (415) 326-2400
      TELEFAX: (415) 326-2422
;
  INFORMATION FOR SEQ ID NO: 11:
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    SEQUENCE CHARACTERISTICS:
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      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: not relevant
      TOPOLOGY: not relevant
    MOLECULE TYPE: peptide
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US-08-406-271-11
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           2 RRS 4
Db
RESULT 30
US-08-406-271-12
; Sequence 12, Application US/08406271
; Patent No. 5919913
  GENERAL INFORMATION:
    APPLICANT: Nuyens, Jan H.
    APPLICANT: Van Veen, Harry H.
    TITLE OF INVENTION: Isolation of Lactoferrin from Milk
    NUMBER OF SEQUENCES: 28
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: TOWNSEND and TOWNSEND and CREW LLP
      STREET: One Market Plaza, Steuart Street Tower, 20th
      STREET: Floor
      CITY: San Francisco
      STATE: CA
      COUNTRY: USA
      ZIP: 94105
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
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SOFTWARE: PatentIn Release #1.0, Version #1.30
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    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/198,321
      FILING DATE: 16-FEB-1994
    ATTORNEY/AGENT INFORMATION:
      NAME: Apple, Randolph T.
      REGISTRATION NUMBER: 36,429
      REFERENCE/DOCKET NUMBER: 016994-004910
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (415) 326-2400
      TELEFAX: (415) 326-2422
   INFORMATION FOR SEQ ID NO: 12:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: not relevant
      TOPOLOGY: not relevant
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Qу
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Dh
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RESULT 31
US-08-680-876-35
; Sequence 35, Application US/08680876
; Patent No. 5925558
  GENERAL INFORMATION:
     APPLICANT: Tsien, Roger Y.
     APPLICANT: Cubitt, Andrew B.
     TITLE OF INVENTION: Assays for Protein Kinases Using
     TITLE OF INVENTION: Fluorescent Protein Substrates
    NUMBER OF SEQUENCES: 48
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend and Crew LLP
      STREET: Two Embarcadero Center, Eighth Floor
      CITY: San Francisco
      STATE: California
      COUNTRY: USA
      ZIP: 94111-3834
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      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
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OPERATING SYSTEM: PC-DOS/MS-DOS
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    CURRENT APPLICATION DATA:
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      FILING DATE: 16-JUL-1996
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Storella, John S.
      REGISTRATION NUMBER: 32,944
ï
      REFERENCE/DOCKET NUMBER: 02307Z-069200
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (415) 576-0200
      TELEFAX: (415) 576-0300
  INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
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US-08-680-876-35
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RESULT 32
US-08-934-222-77
; Sequence 77, Application US/08934222
; Patent No. 5928896
  GENERAL INFORMATION:
    APPLICANT: EVANS, Herbert J.
    APPLICANT: KINI, R. Manjunatha
    TITLE OF INVENTION: Polypeptides That Include Conformation-
    TITLE OF INVENTION: Constraining Groups Which Flank A Protein-Protein
Interaction
    TITLE OF INVENTION: Site
    NUMBER OF SEQUENCES: 153
;
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Foley & Lardner
      STREET: Suite 500, 3000 K Street NW
      CITY: Washington
      STATE: DC
      COUNTRY: USA
      ZIP: 20007
    COMPUTER READABLE FORM:
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      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
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FILING DATE: 19-SEPT-1997
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    PRIOR APPLICATION DATA:
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;
      FILING DATE: 03-MAY-1996
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/143,364
      FILING DATE: 29-OCT-1993
    PRIOR APPLICATION DATA:
;
      APPLICATION NUMBER: U.S. 08/051,741
;
      FILING DATE: 23-APR-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: Isacson, John P.
      REGISTRATION NUMBER:
      REFERENCE/DOCKET NUMBER: 040433/0148
  INFORMATION FOR SEQ ID NO: 77:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
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      TYPE: amino acid
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      TOPOLOGY: linear
US-08-934-222-77
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 Matches
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Qy
             111
           2 PRR 4
Db
RESULT 33
US-08-933-402-77
; Sequence 77, Application US/08933402
; Patent No. 5948887
  GENERAL INFORMATION:
;
    APPLICANT: EVANS, Herbert J.
    APPLICANT: KINI, R. Manjunatha
    TITLE OF INVENTION: Polypeptides That Include Conformation-
    TITLE OF INVENTION: Constraining Groups Which Flank A Protein-Protein
Interaction
    TITLE OF INVENTION: Site
    NUMBER OF SEQUENCES: 153
    CORRESPONDENCE ADDRESS:
;
      ADDRESSEE: Foley & Lardner
      STREET: Suite 500, 3000 K Street NW
      CITY: Washington
      STATE: DC
      COUNTRY: USA
      ZIP: 20007
;
    COMPUTER READABLE FORM:
;
      MEDIUM TYPE: Floppy disk
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      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/933,402
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      FILING DATE: 19-SEPT-1997
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PRIOR APPLICATION DATA:
;
      APPLICATION NUMBER: 08/532,818
;
      FILING DATE: 03-MAY-1996
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/143,364
      FILING DATE: 29-OCT-1993
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/051,741
      FILING DATE: 23-APR-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: Isacson, John P.
      REGISTRATION NUMBER: 33,751
      REFERENCE/DOCKET NUMBER: 040433/0148
  INFORMATION FOR SEQ ID NO: 77:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
;
      TYPE: amino acid
      TOPOLOGY: linear
US-08-933-402-77
 Query Match
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           3; Conservative 0; Mismatches 0; Indels
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 Matches
           8 PRR 10
Qу
             111
Db
           2 PRR 4
RESULT 34
US-09-207-621-77
; Sequence 77, Application US/09207621
; Patent No. 5952465
  GENERAL INFORMATION:
    APPLICANT: EVANS, Herbert J.
;
    APPLICANT: KINI, R. Manjunatha
    TITLE OF INVENTION: Polypeptides That Include Conformation-
    TITLE OF INVENTION: Constraining Groups Which Flank A Proten-Protein
Interaction Sit
    NUMBER OF SEQUENCES: 153
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Foley & Lardner
      STREET: Suite 500, 3000 K Street NW
      CITY: Washington
      STATE: DC
      COUNTRY: USA
      ZIP: 20007
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
;
      SOFTWARE: PatentIn Release #1.0, Version #1.25
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    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/207,621
      FILING DATE:
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    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 08/532,818
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FILING DATE: 03-MAY-1996
       APPLICATION NUMBER: PCT/US94/04294
       FILING DATE: 21-APR-1994
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/143,364
       FILING DATE: 29-OCT-1993
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/051,741
       FILING DATE: 23-APR-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: Isacson, John P.
      REGISTRATION NUMBER: 33,751
       REFERENCE/DOCKET NUMBER: 040433/0148
   INFORMATION FOR SEQ ID NO: 77:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
US-09-207-621-77
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  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
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Db
            2 PRR 4
RESULT 35
US-08-532-818-77
; Sequence 77, Application US/08532818
; Patent No. 5965698
   GENERAL INFORMATION:
    APPLICANT: EVANS, Herbert J. APPLICANT: KINI, R. Manjunatha
;
     TITLE OF INVENTION: Polypeptides That Include Conformation-
     TITLE OF INVENTION: Constraining Groups Which Flank A Protein-Protein
Interaction
    TITLE OF INVENTION: Site
    NUMBER OF SEQUENCES: 153
    CORRESPONDENCE ADDRESS:
;
       ADDRESSEE: Foley & Lardner
       STREET: Suite 500, 3000 K Street NW
       CITY: Washington
       STATE: DC
       COUNTRY: USA
       ZIP: 20007
;
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
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       OPERATING SYSTEM: PC-DOS/MS-DOS
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       SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/532,818
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       FILING DATE: 03-MAY-1996
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APPLICATION NUMBER: PCT/US94/04294
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      FILING DATE: 21-APR-1994
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      APPLICATION NUMBER: U.S. 08/143,364
      FILING DATE: 29-OCT-1993
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/051,741
      FILING DATE: 23-APR-1993
;
    ATTORNEY/AGENT INFORMATION:
      NAME: Isacson, John P.
      REGISTRATION NUMBER: 33,751
      REFERENCE/DOCKET NUMBER: 040433/0148
  INFORMATION FOR SEQ ID NO: 77:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
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       TYPE: amino acid
      TOPOLOGY: linear
US-08-532-818-77
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 Query Match
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Qу
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            2 PRR 4
Db
RESULT 36
US-08-910-041-3
; Sequence 3, Application US/08910041
; Patent No. 5977308
  GENERAL INFORMATION:
    APPLICANT: Cousens, Lawrence S.
    APPLICANT: Eberhardt, Christine D.
    APPLICANT: Gray, Patrick W.
    APPLICANT: Le Trong, Hai
    APPLICANT: Tjoelker, Larry W.
     APPLICANT: Wilder, Cheryl L.
     TITLE OF INVENTION: Platelet-Activating Factor
    TITLE OF INVENTION: Acetylhydrolase NUMBER OF SEQUENCES: 30
;
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
       STREET: 6300 Sears Tower, 233 South Wacker Drive
       CITY: Chicago
       STATE: Illinois
       COUNTRY: United States of America
       ZIP: 60606-6402
     COMPUTER READABLE FORM:
;
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
     CURRENT APPLICATION DATA:
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       FILING DATE:
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CLASSIFICATION: 424
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    PRIOR APPLICATION DATA:
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      APPLICATION NUMBER: US 08/483,232
      FILING DATE: 07-JUN-1995
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/318,905
      FILING DATE: 06-OCT-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/133,803
      FILING DATE: 06-OCT-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: Rin-Laures, Li-Hsien
      REGISTRATION NUMBER: 33,547
      REFERENCE/DOCKET NUMBER:
                                27866/34026
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (312) 474-6300
      TELEFAX: (312) 474-0448
;
      TELEX: 25-3658
  INFORMATION FOR SEQ ID NO: 3:
;
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-910-041-3
                         27.3%; Score 3; DB 2; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches
 Matches
                                                  0; Indels
                                                                0; Gaps
                                                                            0;
           6 MKP 8
Qу
             111
           1 MKP 3
RESULT 37
US-08-871-355A-211
; Sequence 211, Application US/08871355A
; Patent No. 6015669
  GENERAL INFORMATION:
    APPLICANT: David William Holden
     TITLE OF INVENTION: Identification of Genes
;
    NUMBER OF SEQUENCES: 501
;
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Patrea L. Pabst
       STREET: 2800 One Atlantic Center
      STREET: 1201 West Peachtree Street
      CITY: Atlanta
      STATE: Georgia
;
      COUNTRY: USA
;
       ZIP: 30309-3450
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
;
    CURRENT APPLICATION DATA:
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APPLICATION NUMBER: US/08/871,355A
;
      FILING DATE: 09-JUN-1997
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/GB95/02875
      FILING DATE: 11-DEC-1995
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Pabst, Patrea L.
      REGISTRATION NUMBER: 31,284
      REFERENCE/DOCKET NUMBER: RPMS 101 CON
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (404) 873-8794
      TELEFAX: (404) 873-8795
  INFORMATION FOR SEQ ID NO: 211:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: protein
    HYPOTHETICAL: NO
US-08-871-355A-211
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
          3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0;
 Matches
           8 PRR 10
Qу
             111
           4 PRR 6
Db
RESULT 38
US-08-159-339A-1139
; Sequence 1139, Application US/08159339A
; Patent No. 6037135
   GENERAL INFORMATION:
    APPLICANT: Kubo, Ralph T.
    APPLICANT: Grey, Howard M.
    APPLICANT: Sette, Alessandro
    APPLICANT: Celis, Esteban
;
    TITLE OF INVENTION: HLA Binding peptides and Their
    TITLE OF INVENTION: Uses
    NUMBER OF SEQUENCES: 1254
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Townsend and Townsend and Crew LLP
      STREET: Two Embarcadero Center, Eighth Floor
;
      CITY: San Francisco
      STATE: CA
      COUNTRY: USA
      ZIP: 94111-3834
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Diskette
      COMPUTER: IBM Compatible
      OPERATING SYSTEM: DOS
      SOFTWARE: FastSEQ for Windows Version 2.0
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CURRENT APPLICATION DATA:
;
      APPLICATION NUMBER: US/08/159,339A
;
      FILING DATE: 29-NOV-1993
      CLASSIFICATION: 424
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/926,666
      FILING DATE: 07-AUG-1992
      APPLICATION NUMBER: US 08/027,746
      FILING DATE: 05-MAR-1993
      APPLICATION NUMBER: US 08/103,396
      FILING DATE: 06-AUG-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: Weber, Ellen Lauver
      REGISTRATION NUMBER: 32,762
      REFERENCE/DOCKET NUMBER: 018623-005030US
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (415) 576-0200
;
      TELEFAX: (415) 576-0300
      TELEX:
  INFORMATION FOR SEQ ID NO: 1139:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-159-339A-1139
                         27.3%; Score 3; DB 3; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative
                               0; Mismatches 0; Indels
                                                                    Gaps
                                                                            0;
 Matches
Qy
           8 PRR 10
             111
            5 PRR 7
RESULT 39
US-09-328-474-3
; Sequence 3, Application US/09328474
; Patent No. 6045794
  GENERAL INFORMATION:
    APPLICANT: Cousens, Lawrence S.
    APPLICANT: Eberhardt, Christine D.
    APPLICANT: Gray, Patrick W.
    APPLICANT:
                Le Trong, Hai
                Tjoelker, Larry W.
    APPLICANT:
    APPLICANT: Wilder, Cheryl L.
    TITLE OF INVENTION: Platelet-Activating Factor
     TITLE OF INVENTION: Acetylhydrolase
;
    NUMBER OF SEQUENCES: 30
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
       STREET: 6300 Sears Tower, 233 South Wacker Drive
      CITY: Chicago
       STATE: Illinois
       COUNTRY: United States of America
```

```
ZIP: 60606-6402
;
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/328,474
      FILING DATE:
      CLASSIFICATION:
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/483,232
      FILING DATE: 07-JUN-1995
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/318,905
      FILING DATE: 06-OCT-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/133,803
      FILING DATE: 06-OCT-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: Rin-Laures, Li-Hsien
      REGISTRATION NUMBER: 33,547
      REFERENCE/DOCKET NUMBER: 27866/34026
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (312) 474-6300
      TELEFAX: (312) 474-0448
      TELEX: 25-3658
  INFORMATION FOR SEQ ID NO: 3:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-09-328-474-3
 Query Match
                         27.3%; Score 3; DB 3; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
                                                               0; Gaps
           3; Conservative 0; Mismatches 0; Indels
                                                                           0;
           6 MKP 8
Qу
             1 MKP 3
Db
RESULT 40
US-09-231-797-77
; Sequence 77, Application US/09231797
; Patent No. 6084066
  GENERAL INFORMATION:
    APPLICANT: EVANS, Herbert J.
;
    APPLICANT: KINI, R. Manjunatha
    TITLE OF INVENTION: Polypeptides That Include Conformation-
    TITLE OF INVENTION: Constraining Groups Which Flank A Proten-Protein
Interaction Sit
    NUMBER OF SEQUENCES: 153
    CORRESPONDENCE ADDRESS:
;
      ADDRESSEE: Foley & Lardner
```

```
STREET: Suite 500, 3000 K Street NW
      CITY: Washington
      STATE: DC
      COUNTRY: USA
      ZIP: 20007
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/231,797
      FILING DATE:
    PRIOR APPLICATION DATA:
ï
      APPLICATION NUMBER: 08/532,818
      FILING DATE: 03-MAY-1996
      APPLICATION NUMBER: PCT/US94/04294
      FILING DATE: 21-APR-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/143,364
      FILING DATE: 29-OCT-1993
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/051,741
;
      FILING DATE: 23-APR-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: Isacson, John P.
      REGISTRATION NUMBER: 33,751
      REFERENCE/DOCKET NUMBER: 040433/0148
   INFORMATION FOR SEQ ID NO: 77:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
US-09-231-797-77
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
                                                             0; Gaps
           3; Conservative 0; Mismatches 0; Indels
                                                                            0;
  Matches
            8 PRR 10
Qу
             \perp111
           2 PRR 4
Db
RESULT 41
US-08-609-236-5
; Sequence 5, Application US/08609236
; Patent No. 6087398
   GENERAL INFORMATION:
    APPLICANT: Steven R. Goodman
    TITLE OF INVENTION: No. 6087398el Sickle Cell Anemia Treatment
    NUMBER OF SEQUENCES: 6
     CORRESPONDENCE ADDRESS:
      ADDRESSEE: McGregor & Adler, LLP
       STREET: 8011 Candle Lane
      CITY: Houston
      STATE: Texas
```

```
COUNTRY: USA
;
      ZIP: 77071
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: Apple Macintosh
      OPERATING SYSTEM: Macintosh
      SOFTWARE: Microsoft Word for Macintosh
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/609,236
      FILING DATE: March 1, 1996
      CLASSIFICATION: 514
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER:
                           60/002,288
      FILING DATE: August 14, 1995
      CLASSIFICATION: 514
    ATTORNEY/AGENT INFORMATION:
      NAME: Benjamin Aaron Adler, Ph.D.
      REGISTRATION NUMBER: 35,423
      REFERENCE/DOCKET NUMBER: D5807
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 713-777-2321
      TELEFAX: 713-777-6908
   INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11
      TYPE: Amino acid
      STRANDEDNESS:
      TOPOLOGY: Linear
    MOLECULE TYPE:
      DESCRIPTION: Peptide
    HYPOTHETICAL: No
    ANTI-SENSE: No
    FRAGMENT TYPE:
    ORIGINAL SOURCE:
      STRAIN:
      INDIVIDUAL ISOLATE:
      DEVELOPMENTAL STAGE:
      TISSUE TYPE:
      CELL TYPE:
      CELL LINE:
US-08-609-236-5
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches 0;
                                                                0; Gaps
                                                                            0;
                                                     Indels
  Matches
            5 TMK 7
Qу
             +
            9 TMK 11
Db
RESULT 42
US-09-100-546-3
; Sequence 3, Application US/09100546
; Patent No. 6099836
; GENERAL INFORMATION:
     APPLICANT: Cousens, Lawrence S.
```

```
APPLICANT: Eberhardt, Christine D.
;
    APPLICANT: Gray, Patrick W.
;
    APPLICANT: Le Trong, Hai
    APPLICANT: Tjoelker, Larry W.
    APPLICANT: Wilder, Cheryl L.
    TITLE OF INVENTION: Platelet-Activating Factor
    TITLE OF INVENTION: Acetylhydrolase
    NUMBER OF SEQUENCES: 30
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
      STREET: 6300 Sears Tower, 233 South Wacker Drive
      CITY: Chicago
      STATE: Illinois
      COUNTRY: United States of America
      ZIP: 60606-6402
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/100,546
      FILING DATE:
      CLASSIFICATION:
    PRIOR APPLICATION DATA:
;
      APPLICATION NUMBER: US/09/010,715
      FILING DATE:
      APPLICATION NUMBER: US 08/318,905
      FILING DATE: 06-OCT-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/133,803
      FILING DATE:
                    06-OCT-1993
;
    ATTORNEY/AGENT INFORMATION:
      NAME: No. 6099836and, Greta E.
ï
      REGISTRATION NUMBER: 35,302
      REFERENCE/DOCKET NUMBER: 27866/32793
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (312) 474-6300
      TELEFAX: (312) 474-0448
      TELEX: 25-3658
   INFORMATION FOR SEQ ID NO:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
     MOLECULE TYPE: peptide
US-09-100-546-3
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                             0; Gaps
                                                                            0;
 Matches
           6 MKP 8
Qу
             \perp
Db
           1 MKP 3
```

```
RESULT 43
US-08-934-224-77
; Sequence 77, Application US/08934224
; Patent No. 6100044
  GENERAL INFORMATION:
    APPLICANT: EVANS, Herbert J.
    APPLICANT: KINI, R. Manjunatha
    TITLE OF INVENTION: Polypeptides That Include Conformation-
    TITLE OF INVENTION: Constraining Groups Which Flank A Protein-Protein
Interaction
    TITLE OF INVENTION: Site
    NUMBER OF SEQUENCES: 153
    CORRESPONDENCE ADDRESS:
       ADDRESSEE: Foley & Lardner
       STREET: Suite 500, 3000 K Street NW
      CITY: Washington
       STATE: DC
      COUNTRY: USA
       ZIP: 20007
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
;
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/934,224
       FILING DATE:
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 08/532,818
       FILING DATE: 03-MAY-1996
      APPLICATION NUMBER: PCT/US94/04294
       FILING DATE: 21-APR-1994
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: U.S. 08/143,364
       FILING DATE: 29-OCT-1993
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: U.S. 08/051,741
       FILING DATE: 23-APR-1993
    ATTORNEY/AGENT INFORMATION:
       NAME: Isacson, John P.
       REGISTRATION NUMBER: 33,751
       REFERENCE/DOCKET NUMBER: 040433/0148
   INFORMATION FOR SEQ ID NO: 77:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY:
                 linear
US-08-934-224-77
  Query Match
                          27.3%; Score 3; DB 3; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                             0;
  Matches
            8 PRR 10
Qу
              \parallel \parallel \parallel
Db
            2 PRR 4
```

```
RESULT 44
US-08-933-843-77
; Sequence 77, Application US/08933843
; Patent No. 6111069
   GENERAL INFORMATION:
     APPLICANT: EVANS, Herbert J.
     APPLICANT: KINI, R. Manjunatha
     TITLE OF INVENTION: Polypeptides That Include Conformation-
     TITLE OF INVENTION: Constraining Groups Which Flank A Protein-Protein
Interaction
     TITLE OF INVENTION:
                         Site
     NUMBER OF SEQUENCES: 153
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Foley & Lardner
       STREET: Suite 500, 3000 K Street NW
;
       CITY: Washington
       STATE: DC
;
       COUNTRY: USA
       ZIP: 20007
;
     COMPUTER READABLE FORM:
;
       MEDIUM TYPE: Floppy disk
;
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
;
       SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
;
      APPLICATION NUMBER: US/08/933,843
       FILING DATE: 19-SEPT-1997
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER:
                           08/532,818
       FILING DATE: 03-MAY-1996
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/143,364
       FILING DATE: 29-OCT-1993
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/051,741
       FILING DATE: 23-APR-1993
     ATTORNEY/AGENT INFORMATION:
       NAME: Isacson, John P.
       REGISTRATION NUMBER: 33,751
       REFERENCE/DOCKET NUMBER: 040433/0148
   INFORMATION FOR SEQ ID NO: 77:
;
    SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
US-08-933-843-77
                          27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
            3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
 Matches
            8 PRR 10
Qу
             \perp
            2 PRR 4
Db
```

```
RESULT 45
US-09-010-715-3
; Sequence 3, Application US/09010715
; Patent No. 6146625
  GENERAL INFORMATION:
     APPLICANT: Cousens, Lawrence S.
    APPLICANT: Eberhardt, Christine D.
    APPLICANT: Gray, Patrick W.
;
    APPLICANT: Le Trong, Hai
    APPLICANT: Tjoelker, Larry W.
    APPLICANT: Wilder, Cheryl L.
    TITLE OF INVENTION: Platelet-Activating Factor
     TITLE OF INVENTION: Acetylhydrolase
    NUMBER OF SEQUENCES: 30
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
      STREET: 6300 Sears Tower, 233 South Wacker Drive
      CITY: Chicago
      STATE: Illinois
      COUNTRY: United States of America
      ZIP: 60606-6402
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/010,715
      FILING DATE:
      CLASSIFICATION:
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/318,905
      FILING DATE: 06-OCT-1994
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/133,803
      FILING DATE: 06-OCT-1993
     ATTORNEY/AGENT INFORMATION:
      NAME: No. 6146625and, Greta E.
      REGISTRATION NUMBER: 35,302
      REFERENCE/DOCKET NUMBER: 27866/32793
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (312) 474-6300
      TELEFAX: (312) 474-0448
      TELEX: 25-3658
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
US-09-010-715-3
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
            3; Conservative 0; Mismatches 0; Indels 0; Gaps
  Matches
```

```
RESULT 46
US-08-934-223-77
; Sequence 77, Application US/08934223
; Patent No. 6147189
  GENERAL INFORMATION:
    APPLICANT: EVANS, Herbert J.
    APPLICANT: KINI, R. Manjunatha
    TITLE OF INVENTION: Polypeptides That Include Conformation-
    TITLE OF INVENTION: Constraining Groups Which Flank A Protein-Protein
Interaction
    TITLE OF INVENTION: Site
;
    NUMBER OF SEQUENCES: 153
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Foley & Lardner
       STREET: Suite 500, 3000 K Street NW
      CITY: Washington
       STATE: DC
       COUNTRY: USA
       ZIP: 20007
;
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/08/934,223
;
       FILING DATE:
;
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: US/08/532,818
       FILING DATE: 03-MAY-1996
       APPLICATION NUMBER: PCT/US94/04294
       FILING DATE: 21-APR-1994
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: U.S. 08/143,364
       FILING DATE: 29-OCT-1993
;
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: U.S. 08/051,741
       FILING DATE: 23-APR-1993
     ATTORNEY/AGENT INFORMATION:
       NAME: Isacson, John P.
       REGISTRATION NUMBER: 33,751
       REFERENCE/DOCKET NUMBER: 040433/0148
   INFORMATION FOR SEQ ID NO: 77:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
;
       TYPE: amino acid
       TOPOLOGY: linear
US-08-934-223-77
                          27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
                                                                 0; Gaps
                                                                             0:
             3; Conservative 0; Mismatches 0; Indels
  Matches
```

```
8 PRR 10
              \mathbf{I}
           2 PRR 4
Db
RESULT 47
US-08-836-075A-107
; Sequence 107, Application US/08836075A
; Patent No. 6180768
; GENERAL INFORMATION:
    APPLICANT: MAERTENS, GEERT
    APPLICANT: STUYVER, LIEVEN
    TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
     TITLE OF INVENTION: AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND
DIAGNOSTIC
    TITLE OF INVENTION: AGENTS
    NUMBER OF SEQUENCES: 207
;
    CORRESPONDENCE ADDRESS:
;
      ADDRESSEE: ARNOLD, WHITE & DURKEE
      STREET: P.O. BOX 4433
      CITY: HOUSTON
      STATE: TEXAS
      COUNTRY: USA
      ZIP: 77210-4433
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
;
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: Microsoft Word 6.0 / ASCII text output
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/836,075A
       FILING DATE: 21 Apr 1997
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: PCT/EP95/04155
       FILING DATE: 23 Oct 1995
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: EP 94870166.9
       FILING DATE: 21 Oct 1994
     PRIOR APPLICATION DATA:
      APPLICATION NUMBER: EP 95870076.7
       FILING DATE: 28 Jun 1995
     ATTORNEY/AGENT INFORMATION:
       NAME: KAMMERER, PATRICIA A.
       REGISTRATION NUMBER: 29,775
       REFERENCE/DOCKET NUMBER: INNS:004
   INFORMATION FOR SEQ ID NO: 107:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
US-08-836-075A-107
                          27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
```

3; Conservative 0; Mismatches 0; Indels

Matches

0; Gaps

```
1 ARQ 3
Qу
             Db
           1 ARQ 3
RESULT 48
US-08-836-075A-108
; Sequence 108, Application US/08836075A
; Patent No. 6180768
  GENERAL INFORMATION:
    APPLICANT: MAERTENS, GEERT
    APPLICANT: STUYVER, LIEVEN
    TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
    TITLE OF INVENTION: AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND
DIAGNOSTIC
    TITLE OF INVENTION: AGENTS
    NUMBER OF SEQUENCES: 207
;
    CORRESPONDENCE ADDRESS:
;
      ADDRESSEE: ARNOLD, WHITE & DURKEE
      STREET: P.O. BOX 4433
      CITY: HOUSTON
      STATE: TEXAS
      COUNTRY: USA
      ZIP: 77210-4433
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: Microsoft Word 6.0 / ASCII text output
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/836,075A
      FILING DATE: 21 Apr 1997
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/EP95/04155
      FILING DATE: 23 Oct 1995
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: EP 94870166.9
      FILING DATE: 21 Oct 1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: EP 95870076.7
      FILING DATE: 28 Jun 1995
    ATTORNEY/AGENT INFORMATION:
      NAME: KAMMERER, PATRICIA A.
      REGISTRATION NUMBER: 29,775
      REFERENCE/DOCKET NUMBER: INNS:004
  INFORMATION FOR SEQ ID NO: 108:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-08-836-075A-108
                         27.3%; Score 3; DB 3; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.7e+03;
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3; Conservative 0; Mismatches 0; Indels

0; Gaps

0;

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9 RRS 11
QУ
             111
           2 RRS 4
Db
RESULT 49
US-08-602-999A-290
; Sequence 290, Application US/08602999A
; Patent No. 6184205
  GENERAL INFORMATION:
    APPLICANT: SPARKS, Andrew B.
    APPLICANT: KAY, Brian K.
    APPLICANT: THORN, Judith M.
    APPLICANT: QUILLIAM, Lawrence A.
    APPLICANT:
                DER, Channing J.
                FOWLKES, Dana M.
    APPLICANT:
    APPLICANT: RIDER, James E.
    TITLE OF INVENTION: SH3 BINDING PEPTIDES AND METHODS OF
    TITLE OF INVENTION: ISOLATING AND USING SAME
    NUMBER OF SEQUENCES: 467
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Pennie & Edmonds
      STREET: 1155 Avenue of the Americas
      CITY: New York
      STATE: New York
      COUNTRY: U.S.A.
      ZIP: 10036-2711
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/602,999A
;
      FILING DATE: 16-FEB-1996
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: Misrock, S. Leslie
      REGISTRATION NUMBER: 18,872
      REFERENCE/DOCKET NUMBER: 1101-202
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (212) 790-9090
      TELEFAX: (212) 869-9741/8864
      TELEX: 66141 PENNIE
   INFORMATION FOR SEQ ID NO:
                              290:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      TOPOLOGY: unknown
    MOLECULE TYPE: peptide
US-08-602-999A-290
                         27.3%; Score 3; DB 3; Length 11;
 Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
 Matches
```

TOPOLOGY: linear

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RESULT 50
US-08-652-877-41
; Sequence 41, Application US/08652877
 Patent No. 6187548
  GENERAL INFORMATION:
    APPLICANT: Akerstrom, Goran
    APPLICANT: Juhlin, Claes
    APPLICANT: Rask, Lars
    APPLICANT: Crumley, Gregg R.
                Morse, Clarence C.
    APPLICANT:
                Murray, Edward M.
    APPLICANT:
    APPLICANT: Hjalm, Goran
    TITLE OF INVENTION: Human Calcium Sensor Protein, Fragments
    TITLE OF INVENTION: Thereof and DNA Encoding Same
    NUMBER OF SEQUENCES: 106
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Rhone-Poulenc Rorer Inc.
      STREET: 500 Arcola Rd., 3C43
      CITY: Collegeville
      STATE: PA
      COUNTRY: USA
      ZIP: 19426-0107
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: Macintosh
      OPERATING SYSTEM: System 7.5.1
      SOFTWARE: Word 6.0 (Patentin)
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/652,877
      FILING DATE:
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: PCT/US95/15203
       FILING DATE: 22-NOV-1995
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/344,836
       FILING DATE: 23-NOV-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/487,314
       FILING DATE: 07-JUNE-1995
    ATTORNEY/AGENT INFORMATION:
      NAME:
             Savitzky, Martin
       REGISTRATION NUMBER: 29,699
       REFERENCE/DOCKET NUMBER: A1355E-US
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: 610-454-3816
       TELEFAX: 610-454-3808
   INFORMATION FOR SEQ ID NO: 41:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS:
```

```
MOLECULE TYPE: peptide
    HYPOTHETICAL: NO
     FRAGMENT TYPE: internal
US-08-652-877-41
 Ouery Match
                         27.3%; Score 3; DB 3; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches 0; Indels
 Matches
                                                             0; Gaps
                                                                            0;
            6 MKP 8
Qу
             \perp
            9 MKP 11
Db
RESULT 51
US-09-189-344-16
; Sequence 16, Application US/09189344
; Patent No. 6191258
  GENERAL INFORMATION:
    APPLICANT: Lamb et al., Christopher J.
    TITLE OF INVENTION: NOVEL TRANSCRIPTION ENHANCER ELEMENT AND
    TITLE OF INVENTION: TRANSCRIPTION FACTOR AND METHODS OF USE THEREFOR
    NUMBER OF SEQUENCES: 22
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Fish & Richardson P.C.
      STREET: 4225 Executive Square, Suite 1400
      CITY: La Jolla
      STATE: CA
      COUNTRY: USA
      ZIP: 92037
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
    CURRENT APPLICATION DATA:
;
      APPLICATION NUMBER: US/09/189,344
      FILING DATE:
      CLASSIFICATION:
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/669,721
      FILING DATE: 27-JUN-1996
    ATTORNEY/AGENT INFORMATION:
      NAME: Ellison, Eldora L.
      REGISTRATION NUMBER: 39,967
      REFERENCE/DOCKET NUMBER: 07251/014001
     TELECOMMUNICATION INFORMATION:
      TELEPHONE: 619/678-5070
      TELEFAX: 619/678-5099
   INFORMATION FOR SEQ ID NO: 16:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
;
      TYPE: amino acid
      STRANDEDNESS: not relevant
      TOPOLOGY: linear
    MOLECULE TYPE: protein
US-09-189-344-16
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27.3%; Score 3; DB 3; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0;
 Matches
           7 KPR 9
Qу
             111
Db
           4 KPR 6
RESULT 52
US-09-577-758-3
; Sequence 3, Application US/09577758
; Patent No. 6203790
  GENERAL INFORMATION:
    APPLICANT: Cousens, Lawrence S.
                Eberhardt, Christine D.
    APPLICANT:
ï
    APPLICANT: Gray, Patrick W.
    APPLICANT: Le Trong, Hai
    APPLICANT: Tjoelker, Larry W.
    APPLICANT: Wilder, Cheryl L.
    TITLE OF INVENTION: Platelet-Activating Factor
    TITLE OF INVENTION: Acetylhydrolase
    NUMBER OF SEQUENCES: 30
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
      STREET: 6300 Sears Tower, 233 South Wacker Drive
      CITY: Chicago
       STATE: Illinois
       COUNTRY: United States of America
            60606-6402
       7.TP:
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.25
     CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/577,758
       FILING DATE:
       CLASSIFICATION:
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: 09/010,715
       FILING DATE:
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: US 08/133,803
       FILING DATE: 06-OCT-1993
     ATTORNEY/AGENT INFORMATION:
       NAME: No. 6203790and, Greta E.
       REGISTRATION NUMBER: 35,302
                                27866/32793
       REFERENCE/DOCKET NUMBER:
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (312) 474-6300
       TELEFAX: (312) 474-0448
       TELEX: 25-3658
   INFORMATION FOR SEQ ID NO: 3:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
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TOPOLOGY: linear
    MOLECULE TYPE: peptide
US-09-577-758-3
                          27.3%; Score 3; DB 3; Length 11;
 Query Match
                         100.0%; Pred. No. 1.7e+03;
 Best Local Similarity
                                                 0; Indels
                                                               0; Gaps
                              0; Mismatches
            3; Conservative
            6 MKP 8
Qу
             +111
            1 MKP 3
RESULT 53
US-09-208-966-4
; Sequence 4, Application US/09208966
; Patent No. 6221355
; GENERAL INFORMATION:
  APPLICANT: Dowdy, Steven F.
  TITLE OF INVENTION: ANTI-PATHOGEN SYSTEM AND METHODS OF USE THEREOF
  FILE REFERENCE: 48881/1742
   CURRENT APPLICATION NUMBER: US/09/208,966
  CURRENT FILING DATE: 1998-12-10
  EARLIER APPLICATION NUMBER: 60/082,402
  EARLIER FILING DATE: 1998-04-20
  EARLIER APPLICATION NUMBER: 60/069,012
  EARLIER FILING DATE: 1997-12-10
  NUMBER OF SEO ID NOS: 57
  SOFTWARE: PatentIn Ver. 2.0
  SEQ ID NO 4
    LENGTH: 11
    TYPE: PRT
;
    ORGANISM: human
US-09-208-966-4
  Query Match
                          27.3%; Score 3; DB 3; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
                                                                             0;
                               0; Mismatches
                                                0; Indels
                                                                 0; Gaps
  Matches
             3; Conservative
            1 ARQ 3
Qу
              \perp \perp \perp
Db
            6 ARQ 8
RESULT 54
US-09-208-966-40
; Sequence 40, Application US/09208966
; Patent No. 6221355
; GENERAL INFORMATION:
; APPLICANT: Dowdy, Steven F.
  TITLE OF INVENTION: ANTI-PATHOGEN SYSTEM AND METHODS OF USE THEREOF
  FILE REFERENCE: 48881/1742
; CURRENT APPLICATION NUMBER: US/09/208,966
  CURRENT FILING DATE: 1998-12-10
   EARLIER APPLICATION NUMBER: 60/082,402
; EARLIER FILING DATE: 1998-04-20
```

TYPE: amino acid

;

```
EARLIER APPLICATION NUMBER: 60/069,012
 EARLIER FILING DATE: 1997-12-10
; NUMBER OF SEQ ID NOS: 57
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 40
   LENGTH: 11
   TYPE: PRT
   ORGANISM: human
US-09-208-966-40
                         27.3%; Score 3; DB 3; Length 11;
 Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
            3; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
            1 ARQ 3
Qу
              \perp
            6 ARQ 8
Db
RESULT 55
US-09-208-966-55
; Sequence 55, Application US/09208966
; Patent No. 6221355
; GENERAL INFORMATION:
; APPLICANT: Dowdy, Steven F.
; TITLE OF INVENTION: ANTI-PATHOGEN SYSTEM AND METHODS OF USE THEREOF
 FILE REFERENCE: 48881/1742
  CURRENT APPLICATION NUMBER: US/09/208,966
  CURRENT FILING DATE: 1998-12-10
  EARLIER APPLICATION NUMBER: 60/082,402
  EARLIER FILING DATE: 1998-04-20
  EARLIER APPLICATION NUMBER: 60/069,012
  EARLIER FILING DATE: 1997-12-10
  NUMBER OF SEQ ID NOS: 57
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 55
    LENGTH: 11
    TYPE: PRT
    ORGANISM: human
US-09-208-966-55
                          27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
  Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                             0;
Qу
            8 PRR 10
              \mathbf{I} \mathbf{I} \mathbf{I}
            8 PRR 10
RESULT 56
US-09-208-966-56
; Sequence 56, Application US/09208966
; Patent No. 6221355
; GENERAL INFORMATION:
; APPLICANT: Dowdy, Steven F.
; TITLE OF INVENTION: ANTI-PATHOGEN SYSTEM AND METHODS OF USE THEREOF
```

```
FILE REFERENCE: 48881/1742
  CURRENT APPLICATION NUMBER: US/09/208,966
; CURRENT FILING DATE: 1998-12-10
; EARLIER APPLICATION NUMBER: 60/082,402
 EARLIER FILING DATE: 1998-04-20
 EARLIER APPLICATION NUMBER: 60/069,012
 EARLIER FILING DATE: 1997-12-10
 NUMBER OF SEQ ID NOS: 57
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 56
   LENGTH: 11
   TYPE: PRT
   ORGANISM: human
US-09-208-966-56
                         27.3%; Score 3; DB 3; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.7e+03;
                                                             0; Gaps
                                                                           0;
          3; Conservative
                             0; Mismatches 0; Indels
           8 PRR 10
Qy
             111
           5 PRR 7
RESULT 57
US-09-208-966-57
; Sequence 57, Application US/09208966
; Patent No. 6221355
; GENERAL INFORMATION:
; APPLICANT: Dowdy, Steven F.
  TITLE OF INVENTION: ANTI-PATHOGEN SYSTEM AND METHODS OF USE THEREOF
 FILE REFERENCE: 48881/1742
  CURRENT APPLICATION NUMBER: US/09/208,966
  CURRENT FILING DATE: 1998-12-10
;
  EARLIER APPLICATION NUMBER: 60/082,402
  EARLIER FILING DATE: 1998-04-20
 EARLIER APPLICATION NUMBER: 60/069,012
 EARLIER FILING DATE: 1997-12-10
 NUMBER OF SEQ ID NOS: 57
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 57
   LENGTH: 11
    TYPE: PRT
   ORGANISM: human
US-09-208-966-57
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
           3; Conservative 0; Mismatches 0; Indels
                                                                           0;
 Matches
            8 PRR 10
Qγ
             111
           5 PRR 7
Db
RESULT 58
```

US-08-107-794A-32

```
; Sequence 32, Application US/08107794A
 Patent No. 6225111
  GENERAL INFORMATION:
    APPLICANT: Cochran, Mark D.
    APPLICANT: Chang, Christina H.
    TITLE OF INVENTION: Recombinant Equine Herpesvirus
    NUMBER OF SEQUENCES:
                         71
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: John P. White
      STREET: 1185 Avenue of Americas
      CITY: New York
      STATE: New York
      COUNTRY: USA
      ZIP: 10036
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/107,794A
      FILING DATE: February 7, 1995
      CLASSIFICATION: 435
    ATTORNEY/AGENT INFORMATION:
      NAME: White, John P
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (212) 278-0422
      TELEFAX: (212)391-0525
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
       TOPOLOGY: linear
    MOLECULE TYPE: protein
US-08-107-794A-32
                         27.3%; Score 3; DB 3; Length 11;
 Query Match
                         100.0%; Pred. No. 1.7e+03;
  Best Local Similarity
                                0; Mismatches
                                                                0; Gaps
                                                                             0;
                                                  0;
                                                      Indels
            3; Conservative
            8 PRR 10
Qу
              | | |
            4 PRR 6
Db
RESULT 59
US-08-476-515A-41
; Sequence 41, Application US/08476515A
; Patent No. 6239270
   GENERAL INFORMATION:
     APPLICANT: Akerstrom, Goran
     APPLICANT: Juhlin, Claes
     APPLICANT: Rask, Lars
    APPLICANT: Crumley, Gregg R.
     APPLICANT: Morse, Clarence C.
     APPLICANT: Murray, Edward M.
     APPLICANT: Hjalm, Goran
```

```
TITLE OF INVENTION: Human Calcium Sensor Protein, Fragments
;
    TITLE OF INVENTION: Thereof and DNA Encoding Same
    NUMBER OF SEQUENCES: 84
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Martin Savitzky
      STREET: Rhone-Poulenc Rorer Inc., 500 Arcola Rd.;
      STREET: 3C43,
      CITY: Collegeville
      STATE: PA
      COUNTRY: USA
      ZIP: 19426-0107
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: Compaq PC
      OPERATING SYSTEM: Windows 95
      SOFTWARE: Word 7.0 (Patentin)
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/08/476,515A
      FILING DATE: 07-JUN-1995
      CLASSIFICATION: 435
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 08/344,836
      FILING DATE: 23-NOV-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: WO PCT/SE94/00483
      FILING DATE: 24-MAY-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: SE 9301764-8
       FILING DATE: 24-MAY-1993
    ATTORNEY/AGENT INFORMATION:
      NAME: Savitzky, Martin
      REGISTRATION NUMBER: 29,699
      REFERENCE/DOCKET NUMBER: A1355D
     TELECOMMUNICATION INFORMATION:
      TELEPHONE: 610-454-3816
       TELEFAX: 610-454-3808
   INFORMATION FOR SEQ ID NO: 41:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS:
      TOPOLOGY: linear
     MOLECULE TYPE: peptide
     HYPOTHETICAL: NO
     FRAGMENT TYPE: internal
US-08-476-515A-41
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
            3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0;
            6 MKP 8
Qу
             9 MKP 11
```

```
US-09-263-975-35
; Sequence 35, Application US/09263975
; Patent No. 6248550
   GENERAL INFORMATION:
     APPLICANT: Tsien, Roger Y.
     APPLICANT: Cubitt, Andrew B.
     TITLE OF INVENTION: Assays for Protein Kinases Using
    TITLE OF INVENTION: Fluorescent Protein Substrates
    NUMBER OF SEQUENCES: 48
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Townsend and Townsend and Crew LLP
       STREET: Two Embarcadero Center, Eighth Floor
       CITY: San Francisco
       STATE: California
       COUNTRY: USA
       ZIP: 94111-3834
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/09/263,975
       FILING DATE:
       CLASSIFICATION:
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: US 08/679,865
       FILING DATE: 16-JUL-1996
     ATTORNEY/AGENT INFORMATION:
       NAME: Storella, John S.
       REGISTRATION NUMBER: 32,944
       REFERENCE/DOCKET NUMBER: 02307Z-069000
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (415) 576-0200
       TELEFAX: (415) 576-0300
   INFORMATION FOR SEQ ID NO: 35:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       STRANDEDNESS:
       TOPOLOGY: linear
     MOLECULE TYPE: peptide
US-09-263-975-35
                          27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
                                                                             0;
                                                                 0;
                                                                     Gaps
                              0; Mismatches
                                                   0; Indels
  Matches
             3; Conservative
            9 RRS 11
Qу
              111
            4 RRS 6
Db
RESULT 61
US-09-413-492-77
; Sequence 77, Application US/09413492
; Patent No. 6258550
```

```
GENERAL INFORMATION:
    APPLICANT: EVANS, Herbert J.
    APPLICANT: KINI, R. Manjunatha
    TITLE OF INVENTION: Polypeptides That Include Conformation-
    TITLE OF INVENTION: Constraining Groups Which Flank A Protein-Protein
Interaction
    TITLE OF INVENTION: Site
    NUMBER OF SEQUENCES: 153
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Foley & Lardner
      STREET: Suite 500, 3000 K Street NW
      CITY: Washington
      STATE: DC
;
      COUNTRY: USA
;
      ZIP: 20007
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/413,492
      FILING DATE:
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 08/532,818
      FILING DATE: 03-MAY-1996
      APPLICATION NUMBER: PCT/US94/04294
      FILING DATE: 21-APR-1994
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/143,364
;
       FILING DATE: 29-OCT-1993
;
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: U.S. 08/051,741
       FILING DATE: 23-APR-1993
    ATTORNEY/AGENT INFORMATION:
       NAME: Isacson, John P.
       REGISTRATION NUMBER: 33,751
       REFERENCE/DOCKET NUMBER: 040433/0148
ï
   INFORMATION FOR SEQ ID NO: 77:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: linear
US-09-413-492-77
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
            3; Conservative 0; Mismatches 0; Indels 0;
                                                                            0;
                                                                    Gaps
        8 PRR 10
Qу
             111
            2 PRR 4
RESULT 62
US-09-044-411-7
; Sequence 7, Application US/09044411A
```

```
; Patent No. 6258774
; GENERAL INFORMATION:
 APPLICANT: Stein, Stanley
 TITLE OF INVENTION: CARRIER FOR IN VIVO DELIVERY OF A THERAPEUTIC
; FILE REFERENCE: 601-1-083
  CURRENT APPLICATION NUMBER: US/09/044,411A
  CURRENT FILING DATE: 1998-03-19
; NUMBER OF SEQ ID NOS: 10
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Human immunodeficiency virus type 1
   FEATURE:
   OTHER INFORMATION: Same as Sequence ID 2, but with a substitution of
; Patent No. 6258774
   OTHER INFORMATION: Gln to Pro.
   FEATURE:
   NAME/KEY: BINDING
   LOCATION: (10)
   OTHER INFORMATION: Cys(biotin)
   FEATURE:
   OTHER INFORMATION: Peptide has an N-terminal acetyl group.
    FEATURE:
    OTHER INFORMATION: Peptide has a C-terminal amide group.
US-09-044-411-7
                         27.3%; Score 3; DB 3; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.7e+03;
                                                                             0;
                                                                 0; Gaps
            3; Conservative 0; Mismatches 0; Indels
  Matches
            8 PRR 10
Qу
              111
            6 PRR 8
Db
RESULT 63
US-09-201-945-211
; Sequence 211, Application US/09201945
; Patent No. 6342215
   GENERAL INFORMATION:
     APPLICANT: David William Holden
     TITLE OF INVENTION: Identification of Genes
     NUMBER OF SEQUENCES:
     CORRESPONDENCE ADDRESS:
       ADDRESSEE: Patrea L. Pabst
       STREET: 2800 One Atlantic Center
       STREET: 1201 West Peachtree Street
;
       CITY: Atlanta
       STATE: Georgia
       COUNTRY: USA
       ZIP: 30309-3450
     COMPUTER READABLE FORM:
       MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
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CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/09/201,945
      FILING DATE:
      CLASSIFICATION:
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: 08/637,759
      FILING DATE:
      CLASSIFICATION:
    ATTORNEY/AGENT INFORMATION:
      NAME: Pabst, Patrea L.
      REGISTRATION NUMBER: 31,284
      REFERENCE/DOCKET NUMBER: RPMS 101
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (404) 873-8794
      TELEFAX: (404) 873-8795
  INFORMATION FOR SEQ ID NO: 211:
    SEQUENCE CHARACTERISTICS:
      LENGTH: 11 amino acids
      TYPE: amino acid
      STRANDEDNESS: single
      TOPOLOGY: linear
    MOLECULE TYPE: protein
    HYPOTHETICAL: NO
US-09-201-945-211
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US-09-227-357-423
; Sequence 423, Application US/09227357
; Patent No. 6342581
; GENERAL INFORMATION:
  APPLICANT: Fischer et al.
  TITLE OF INVENTION: 123 Human Secreted Proteins
  FILE REFERENCE: PZ010P1
  CURRENT APPLICATION NUMBER: US/09/227,357
  CURRENT FILING DATE: 1999-01-08
  EARLIER APPLICATION NUMBER: PCT/US98/13684
  EARLIER FILING DATE: 1998-07-07
  EARLIER APPLICATION NUMBER: 60/051,926
   EARLIER FILING DATE: 1997-07-08
   EARLIER APPLICATION NUMBER: 60/052,793
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  EARLIER FILING DATE: 1997-07-08
  EARLIER APPLICATION NUMBER: 60/051,925
  EARLIER FILING DATE: 1997-07-08
  EARLIER APPLICATION NUMBER: 60/051,929
  EARLIER FILING DATE: 1997-07-08
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  EARLIER FILING DATE: 1997-07-08
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  EARLIER FILING DATE: 1997-07-08
  EARLIER APPLICATION NUMBER: 60/051,920
  EARLIER FILING DATE: 1997-07-08
  EARLIER APPLICATION NUMBER: 60/052,733
  EARLIER FILING DATE: 1997-07-08
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  EARLIER FILING DATE: 1997-07-08
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  EARLIER FILING DATE: 1997-07-08
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  EARLIER FILING DATE: 1997-08-18
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;
  EARLIER FILING DATE: 1997-08-18
  EARLIER APPLICATION NUMBER: 60/055,954
  EARLIER FILING DATE: 1997-08-18
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  EARLIER FILING DATE: 1997-09-12
  EARLIER APPLICATION NUMBER: 60/058,660
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 NUMBER OF SEO ID NOS: 672
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; SEQ ID NO 423
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; Sequence 3080, Application US/09187859A
; Patent No. 6358920
; GENERAL INFORMATION:
  APPLICANT: Blaschuk, Orest W.
  APPLICANT: Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
   TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C1
  CURRENT APPLICATION NUMBER: US/09/187,859A
  CURRENT FILING DATE: 1998-11-06
  NUMBER OF SEQ ID NOS: 4052
   SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3080
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    TYPE: PRT
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    FEATURE:
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; Sequence 3125, Application US/09187859A
; Patent No. 6358920
; GENERAL INFORMATION:
; APPLICANT: Blaschuk, Orest W.
  APPLICANT: Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
   TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C1
   CURRENT APPLICATION NUMBER: US/09/187,859A
; CURRENT FILING DATE: 1998-11-06
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US-09-187-859-3170
; Sequence 3170, Application US/09187859A
; Patent No. 6358920
; GENERAL INFORMATION:
; APPLICANT: Blaschuk, Orest W.
  APPLICANT: Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
   TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
   FILE REFERENCE: 100086.407C1
   CURRENT APPLICATION NUMBER: US/09/187,859A
   CURRENT FILING DATE: 1998-11-06
  NUMBER OF SEQ ID NOS: 4052
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RESULT 68
US-09-187-859-3215
; Sequence 3215, Application US/09187859A
; Patent No. 6358920
; GENERAL INFORMATION:
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; APPLICANT: Blaschuk, Orest W.
; APPLICANT: Gour, Barbara J.
 TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
  TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C1
  CURRENT APPLICATION NUMBER: US/09/187,859A
  CURRENT FILING DATE: 1998-11-06
  NUMBER OF SEQ ID NOS: 4052
  SOFTWARE: PatentIn Ver. 2.0
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   LENGTH: 11
   TYPE: PRT
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   OTHER INFORMATION: Representative cyclic modulating agent based on
   OTHER INFORMATION: Desmoglein cell adhesion recognition sequence
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           7 QKT 9
Πh
RESULT 69
US-09-187-859-3260
; Sequence 3260, Application US/09187859A
; Patent No. 6358920
; GENERAL INFORMATION:
; APPLICANT: Blaschuk, Orest W.
; APPLICANT: Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
  TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
 FILE REFERENCE: 100086.407C1
  CURRENT APPLICATION NUMBER: US/09/187,859A
  CURRENT FILING DATE: 1998-11-06
; NUMBER OF SEQ ID NOS: 4052
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; SEQ ID NO 3260
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    OTHER INFORMATION: Desmoglein cell adhesion recognition sequence
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RESULT 70
US-09-500-124-290
; Sequence 290, Application US/09500124
 Patent No. 6432920
  GENERAL INFORMATION:
    APPLICANT: SPARKS, Andrew B.
    APPLICANT: KAY, Brian K.
    APPLICANT: THORN, Judith M.
    APPLICANT: QUILLIAM, Lawrence A.
    APPLICANT: DER, Channing J.
    APPLICANT: FOWLKES, Dana M.
    APPLICANT: RIDER, James E.
     TITLE OF INVENTION: SH3 BINDING PEPTIDES AND METHODS OF
    TITLE OF INVENTION: ISOLATING AND USING SAME
    NUMBER OF SEQUENCES: 467
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Pennie & Edmonds
      STREET: 1155 Avenue of the Americas
      CITY: New York
       STATE: New York
       COUNTRY: U.S.A.
       ZIP: 10036-2711
     COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
       COMPUTER: IBM PC compatible
       OPERATING SYSTEM: PC-DOS/MS-DOS
       SOFTWARE: PatentIn Release #1.0, Version #1.30
     CURRENT APPLICATION DATA:
       APPLICATION NUMBER: US/09/500,124
       FILING DATE:
       CLASSIFICATION:
     PRIOR APPLICATION DATA:
       APPLICATION NUMBER: 08/602,999
       FILING DATE: 16-FEB-1996
     ATTORNEY/AGENT INFORMATION:
       NAME: Misrock, S. Leslie
       REGISTRATION NUMBER: 18,872
;
       REFERENCE/DOCKET NUMBER: 1101-202
     TELECOMMUNICATION INFORMATION:
       TELEPHONE: (212) 790-9090
       TELEFAX: (212) 869-9741/8864
       TELEX: 66141 PENNIE
   INFORMATION FOR SEQ ID NO:
     SEQUENCE CHARACTERISTICS:
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: unknown
     MOLECULE TYPE: peptide
US-09-500-124-290
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; Sequence 20, Application US/09347926
; Patent No. 6440386
; GENERAL INFORMATION:
; APPLICANT: LEUNG, SHUI-ON
  TITLE OF INVENTION: STABILIZED RADIOPHOSPHATE-LABELED PROTEINS
  FILE REFERENCE: 018733/0936
  CURRENT APPLICATION NUMBER: US/09/347,926
  CURRENT FILING DATE: 1999-07-06
  NUMBER OF SEQ ID NOS: 24
  SOFTWARE: PatentIn Ver. 2.1
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; Sequence 5, Application US/09588417
; Patent No. 6458552
; GENERAL INFORMATION:
  APPLICANT: Fourie, Anne
 APPLICANT: Karlsson, Lars
  APPLICANT: Thurmond, Rob
  TITLE OF INVENTION: Metalloprotease Peptide Substrates And Methods
  FILE REFERENCE: ORT-1220
  CURRENT APPLICATION NUMBER: US/09/588,417
  CURRENT FILING DATE: 2000-06-06
  NUMBER OF SEQ ID NOS: 11
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 5
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Description of Artificial Sequence: synthetic
    OTHER INFORMATION: peptide
US-09-588-417-5
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RESULT 73
US-09-839-743-19
; Sequence 19, Application US/09839743
; Patent No. 6472211
; GENERAL INFORMATION:
  APPLICANT: The Salk Institute for Biological Sciences
  APPLICANT: Lamb, Christopher
  APPLICANT: Doerner, Peter
              Laible, Goetz
  APPLICANT:
  TITLE OF INVENTION: No. 6472211el Transcription Enhancer Element and
                       Transcription Factor and Methods of Use Thereof
  TITLE OF INVENTION:
  FILE REFERENCE: SALKINS.008DV3
  CURRENT APPLICATION NUMBER: US/09/839,743
  CURRENT FILING DATE: 2001-04-19
  PRIOR APPLICATION NUMBER: US 09/401,336
  PRIOR FILING DATE: 1999-09-21
  PRIOR APPLICATION NUMBER: US 09/189,344
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/669,721
  PRIOR FILING DATE: 1996-06-27
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; Sequence 15, Application US/09260629
; Patent No. 6479626
; GENERAL INFORMATION:
   APPLICANT: Kim, Jin-Soo
  APPLICANT: Pabo, Carl O.
  APPLICANT: Massachusetts Institute of Technology
  TITLE OF INVENTION: Poly Zinc Finger Proteins With Improved Linkers
  FILE REFERENCE: 019496-002510US
   CURRENT APPLICATION NUMBER: US/09/260,629
   CURRENT FILING DATE: 1999-03-01
   EARLIER APPLICATION NUMBER: US 60/076,454
; EARLIER FILING DATE: 1998-03-02
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NUMBER OF SEQ ID NOS: 24
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   OTHER INFORMATION: Description of Artificial Sequence: longer flexible
   OTHER INFORMATION: linker for fusion protein 268//NRE containing a
   OTHER INFORMATION: Gly-Gly-Gly-Ser sequence
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; Sequence 35, Application US/09129192C
; Patent No. 6495664
; GENERAL INFORMATION:
; APPLICANT: Aurora Biosciences Corporation
; APPLICANT: Cubitt, Andrew B.
; TITLE OF INVENTION: Fluorescent Protein Sensors of Post-Translational
Modifications
; FILE REFERENCE: AURO1270 (08366/031001)
  CURRENT APPLICATION NUMBER: US/09/129,192C
  CURRENT FILING DATE: 1998-07-24
; NUMBER OF SEQ ID NOS: 74
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Job time : 12.3077 secs
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GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 8, 2004, 15:30:07; Search time 8.61538 Seconds

(without alignments)

122.816 Million cell updates/sec

Title: US-09-787-443A-12

Perfect score: 11

Sequence: 1 ARQKTMKPRRS 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 283366 seqs, 96191526 residues

Word size : 0

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Post-processing: Listing first 100 summaries

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1: pir1:*

2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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8	2	18.2	11	1	A60654	substance P - guin
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55	2	18.2		2	S60294		tubulin 2 beta-3 c
			11				
56	2	18.2	11	4	I54081		retinoic acid rece
57	1	9.1	11	1	XAVIBH		bradykinin-potenti
58	1	9.1	11	1	ECLQ2M		tachykinin II - mi
59	1	9.1	11	1	EOOCC		eledoisin - curled
60	1	9.1	11	1	EOOC		eledoisin - musky
61	1	9.1	11	1	GMROL		leucosulfakinin -
62	1	9.1	11	1	LFTWWE		probable trpEG lea
63	1	9.1	11	2	S66196		alcohol dehydrogen
64	1	9.1	11	2	S68392		H+-transporting tw
65	1	9.1	11	2	B49164		chromogranin-B - r
66	1	9.1	11	2	A40693		transgelin - sheep
67	1	9.1	11	2	A38841		rhodopsin homolog
68	1	9.1	11	2	PQ0682		photosystem I 17.5
69	1	9.1	11	2	S00616		parasporal crystal
70	1	9.1	11	2	C53652		rhlR protein - Pse

1 9.1 11 2 S09074 cytoo	chrome P450-4b
1 9.1 11 2 A26930 ermG	leader peptid
1 9.1 11 2 D60409 kassi	inin-like pept
1 9.1 11 2 F60409 subst	tance P-like p
1 9.1 11 2 E60409 subst	tance P-like p
1 9.1 11 2 YHRT morph	hogenetic neur
1 9.1 11 2 YHHU morph	hogenetic neur
1 9.1 11 2 YHBO morph	hogenetic neur
1 9.1 11 2 YHXAE morph	hogenetic neur
1 9.1 11 2 YHJFHY morph	nogenetic neur
1 9.1 11 2 A61365 phyll	lokinin - Rohd
1 9.1 11 2 B26744 megas	scoliakinin -
1 9.1 11 2 B60409 kassi	inin-like pept
1 9.1 11 2 C60409 kassi	inin-like pept
1 9.1 11 2 S07203 uperc	olein - frog (
1 9.1 11 2 S07207 Crini	ia-angiotensin
1 9.1 11 2 S07201 physa	alaemin - frog
1 9.1 11 2 B58501 24K k	kidney and bla
1 9.1 11 2 D58502 27K k	oile and gallb
1 9.1 11 2 A58502 38K I	kidney stone p
1 9.1 11 2 C58501 42K k	oile stone pro
1 9.1 11 2 F58501 43.5F	K bile stone p
1 9.1 11 2 S58244 pyrro	oloquinoline q
1 9.1 11 2 S04875 nifS	protein - Bra
1 9.1 11 2 I41138 acety	yl ornithine d
1 9.1 11 2 \$35490 type	II site-speci
1 9.1 11 2 S21127 preco	orrin methyltr
1 9.1 11 2 S70720 trigg	ger factor hom
1 9.1 11 2 \$33782 aceto	olactate synth
1 9.1 11 2 B39853 LuxC	protein - Pho

ALIGNMENTS

```
RESULT 1
S23308
```

substance P - rainbow trout

C; Species: Oncorhynchus mykiss (rainbow trout)

C;Date: 19-Mar-1997 #sequence revision 19-Mar-1997 #text change 18-Aug-2000

C; Accession: S23308

R; Jensen, J.; Conlon, J.M.

Eur. J. Biochem. 206, 659-664, 1992

A; Title: Substance-P-related and neurokinin-A-related peptides from the brain of

the cod and trout.

A; Reference number: S23186; MUID: 92298992; PMID: 1376687

A; Accession: S23308 A; Molecule type: protein A; Residues: 1-11 <JEN>

A; Experimental source: brain

C; Function:

A; Description: may play a physiological role in the regulation of cardiovascular and gastrointestinal functions

A; Note: substance P is derived by post-translational processing of

preprotachykinin A

C; Superfamily: unassigned animal peptides

C; Keywords: neuropeptide; amidated carboxyl end; tachykinin

```
F;11/Modified site: amidated carboxyl end (Met) #status predicted
  Query Match
                           27.3%; Score 3; DB 2; Length 11;
  Best Local Similarity
                           100.0%; Pred. No. 2e+03;
             3; Conservative
                                 0; Mismatches
                                                        Indels
                                                                                0;
                                                    0;
                                                                   0; Gaps
            7 KPR 9
Qy
              \mathbf{H}
            1 KPR 3
Db
RESULT 2
S23306
substance P - Atlantic cod
C; Species: Gadus morhua (Atlantic cod)
C;Date: 19-Mar-1997 #sequence revision 19-Mar-1997 #text change 18-Aug-2000
C; Accession: S23306
R; Jensen, J.; Conlon, J.M.
Eur. J. Biochem. 206, 659-664, 1992
A; Title: Substance-P-related and neurokinin-A-related peptides from the brain of
the cod and trout.
A; Reference number: S23186; MUID: 92298992; PMID: 1376687
A; Accession: S23306
A; Molecule type: protein
A; Residues: 1-11 <JEN>
A; Experimental source: brain
C; Function:
A; Description: may play a physiological role in the regulation of cardiovascular
and gastrointestinal functions
A; Note: substance P is derived by post-translational processing of
preprotachykinin A
C; Superfamily: unassigned animal peptides
C; Keywords: neuropeptide; amidated carboxyl end; tachykinin
F;11/Modified site: amidated carboxyl end (Met) #status predicted
                           27.3%; Score 3; DB 2; Length 11;
  Query Match
                           100.0%; Pred. No. 2e+03;
  Best Local Similarity
  Matches
             3; Conservative
                                  0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
                                                                                0;
            7 KPR 9
Qу
              \mathbf{I} \mathbf{I} \mathbf{I}
Db
            1 KPR 3
RESULT 3
S66606
quinoline 2-oxidoreductase alpha chain - Comamonas testosteroni (fragment)
C; Species: Comamonas testosteroni
C;Date: 15-Feb-1997 #sequence revision 13-Mar-1997 #text change 17-Mar-1999
C; Accession: S66606
R;Schach, S.; Tshisuaka, B.; Fetzner, S.; Lingens, F.
Eur. J. Biochem. 232, 536-544, 1995
A; Title: Quinoline 2-oxidoreductase and 2-oxo-1, 2-dihydroquinoline 5, 6-
dioxygenase from Comamonas testosteroni 63. The first two enzymes in quinoline
and 3-methylquinoline degradation.
A; Reference number: S66606; MUID: 96035889; PMID: 7556204
A; Accession: S66606
```

```
A; Residues: 1-11 <SCH>
A; Experimental source: strain 63
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 2e+03;
             3; Conservative
                                 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
 Matches
            7 KPR 9
Qу
              III
            9 KPR 11
Db
RESULT 4
S33300
probable substance P - smaller spotted catshark
C; Species: Scyliorhinus canicula (smaller spotted catshark, smaller spotted
dogfish)
C;Date: 19-Mar-1997 #sequence revision 19-Mar-1997 #text change 24-Mar-1999
C; Accession: S33300
R; Waugh, D.; Wang, Y.; Hazon, N.; Balment, R.J.; Conlon, J.M.
Eur. J. Biochem. 214, 469-474, 1993
A; Title: Primary structures and biological activities of substance-P-related
peptides from the brain of the dogfish, Scyliorhinus canicula.
A; Reference number: S33300; MUID: 93292508; PMID: 7685693
A; Accession: S33300
A; Molecule type: protein
A; Residues: 1-11 <WAU>
A; Experimental source: brain
C; Function:
A; Description: may play a physiological role in the regulation of cardiovascular
and gastrointestinal functions
A; Note: substance P is derived by post-translational processing of
preprotachykinin A
C; Keywords: amidated carboxyl end; neuropeptide; tachykinin
F;11/Modified site: amidated carboxyl end (Met) #status predicted
                          27.3%; Score 3; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 2e+03;
                                                                               0;
  Matches
                Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0;
                                                                      Gaps
             3;
            7 KPR 9
Qу
              111
            1 KPR 3
Db
RESULT 5
PH1583
Iq H chain V-D-J region (wild-type clone 6) - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 02-Jun-1994 #sequence_revision 02-Jun-1994 #text change 17-Mar-1999
C; Accession: PH1583
R; Levinson, D.A.; Campos-Torres, J.; Leder, P.
J. Exp. Med. 178, 317-329, 1993
A; Title: Molecular characterization of transgene-induced immunodeficiency in B-
less mice using a novel quantitative limiting dilution polymerase chain reaction
method.
```

A; Molecule type: protein

```
A; Reference number: PH1580; MUID: 93301609; PMID: 8315387
A; Accession: PH1583
A; Molecule type: DNA
A; Residues: 1-11 <LEV>
A; Experimental source: bone marrow pre-B lymphocyte
C; Keywords: immunoglobulin
                          27.3%; Score 3; DB 2;
  Query Match
                                                    Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2e+03;
 Matches
            3; Conservative
                                 0: Mismatches
                                                                               0;
                                                    0; Indels
                                                                  0:
                                                                      Gaps
            1 ARO 3
Qу
              \perp
Db
            2 ARO 4
RESULT 6
XASNBA
bradykinin-potentiating peptide B - mamushi
C; Species: Agkistrodon blomhoffi (mamushi)
C; Date: 13-Jul-1981 #sequence revision 13-Jul-1981 #text change 08-Dec-1995
C; Accession: A01254
R; Kato, H.; Suzuki, T.
Proc. Jpn. Acad. 46, 176-181, 1970
A; Reference number: A01254
A; Accession: A01254
A; Molecule type: protein
A; Residues: 1-11 <KAT>
A; Note: the sequence of the natural peptide was confirmed by the synthesis and
analysis of a peptide having the identical structure and biological properties
C; Superfamily: bradykinin-potentiating peptide
C; Keywords: angiotensin-converting enzyme inhibitor; bradykinin; pyroglutamic
acid; venom
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
  Query Match
                          18.2%; Score 2; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
 Matches
            2; Conservative
                                 0; Mismatches
                                                 0;
                                                       Indels
                                                                  0; Gaps
                                                                               0;
            8 PR 9
Qу
              11
            5 PR 6
Db
RESULT 7
SPHO
substance P - horse
C; Species: Equus caballus (domestic horse)
C;Date: 23-Oct-1981 #sequence revision 23-Oct-1981 #text change 23-Aug-1996
C; Accession: A01558
R; Studer, R.O.; Trzeciak, A.; Lergier, W.
Helv. Chim. Acta 56, 860-866, 1973
A; Title: Isolierung und Aminosaeuresequenz von Substanz P aus Pferdedarm.
A; Reference number: A01558
A; Accession: A01558
A; Molecule type: protein
A; Residues: 1-11 <STU>
```

```
C; Superfamily: substance P precursor
C; Keywords: amidated carboxyl end; hormone
F;11/Modified site: amidated carboxyl end (Met) #status experimental
  Query Match
                          18.2%; Score 2; DB 1; Length 11;
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
                               0; Mismatches
             2;
                Conservative
                                                    0; Indels
                                                                  0;
                                                                      Gaps
                                                                               0;
            7 KP 8
Qу
              11
Db
            3 KP 4
RESULT 8
A60654
substance P - guinea pig
C; Species: Cavia porcellus (quinea pig)
C;Date: 14-May-1993 #sequence_revision 27-Jun-1994 #text change 08-Dec-1995
C; Accession: A60654
R; Murphy, R.
Neuropeptides 14, 105-110, 1989
A; Title: Primary amino acid sequence of guinea-pig substance P.
A; Reference number: A60654; MUID: 90044685; PMID: 2478925
A; Accession: A60654
A; Molecule type: protein
A; Residues: 1-11 < MUR>
C; Superfamily: substance P precursor
C; Keywords: amidated carboxyl end; neuropeptide; tachykinin
F;11/Modified site: amidated carboxyl end (Met) #status experimental
 Query Match
                          18.2%; Score 2; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
             2; Conservative
                                 0; Mismatches
                                                    0;
                                                       Indels
                                                                      Gaps
                                                                               0;
            7 KP 8
Qу
              11
            3 KP 4
Db
RESULT 9
G42762
proteasome endopeptidase complex (EC 3.4.25.1) subunit 13 - bovine (fragment)
C; Species: Bos primigenius taurus (cattle)
C;Date: 04-Mar-1993 #sequence revision 18-Nov-1994 #text change 17-Feb-2003
C; Accession: G42762
R; Dick, L.R.; Moomaw, C.R.; Pramanik, B.C.; DeMartino, G.N.; Slaughter, C.A.
Biochemistry 31, 7347-7355, 1992
A; Title: Identification and localization of a cysteinyl residue critical for the
trypsin-like catalytic activity of the proteasome.
A; Reference number: A42762; MUID: 92378961; PMID: 1510924
A; Accession: G42762
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <DIC>
A; Note: sequence extracted from NCBI backbone (NCBIP:112176)
C; Superfamily: multicatalytic endopeptidase complex chain C9
C; Keywords: hydrolase
```

```
18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
            2; Conservative
                                0; Mismatches
                                                  0;
                                                      Indels
                                                                  0; Gaps
                                                                              0;
            3 OK 4
Qу
              7 QK 8
Db
RESULT 10
A33917
dihydroorotase (EC 3.5.2.3) - Chinese hamster (fragment)
C; Species: Cricetulus griseus (Chinese hamster)
C;Date: 09-Mar-1990 #sequence revision 09-Mar-1990 #text change 07-Nov-1997
C; Accession: A33917
R; Simmer, J.P.; Kelly, R.E.; Scully, J.L.; Grayson, D.R.; Rinker Jr., A.G.;
Bergh, S.T.; Evans, D.R.
Proc. Natl. Acad. Sci. U.S.A. 86, 4382-4386, 1989
A; Title: Mammalian aspartate transcarbamylase (ATCase): sequence of the ATCase
domain and interdomain linker in the CAD multifunctional polypeptide and
properties of the isolated domain.
A; Reference number: A33917; MUID: 89282776; PMID: 2543974
A; Accession: A33917
A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-11 <SIM>
A; Cross-references: GB:M23652
C; Superfamily: rudimentary enzyme; aspartate/ornithine carbamoyltransferase
homology; Bacillus dihydroorotase homology; biotin carboxylase homology;
carbamoyl-phosphate synthase (ammonia) homology; carbamoyl-phosphate synthase
(glutamine-hydrolyzing) large chain homology; carbamoyl-phosphate synthase
(glutamine-hydrolyzing) small chain homology; trpG homology
C; Keywords: hydrolase
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
                                0; Mismatches 0;
  Matches
            2; Conservative
                                                      Indels
                                                                  0; Gaps
                                                                              0;
            3 QK 4
Qу
              4 OK 5
Db
RESULT 11
JN0023
substance P - chicken
C; Species: Gallus gallus (chicken)
C;Date: 07-Sep-1990 #sequence revision 07-Sep-1990 #text change 11-Jul-1997
C; Accession: JN0023
R; Conlon, J.M.; Katsoulis, S.; Schmidt, W.E.; Thim, L.
Regul. Pept. 20, 171-180, 1988
A; Title: [Arg3] substance P and neurokinin A from chicken small intestine.
A; Reference number: JN0023; MUID: 88204263; PMID: 2452461
A; Accession: JN0023
A; Molecule type: protein
A; Residues: 1-11 <CON>
```

```
C; Superfamily: substance P precursor
C; Keywords: amidated carboxyl end; tachykinin
F;11/Modified site: amidated carboxyl end (Met) #status predicted
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
  Matches
             2; Conservative 0; Mismatches 0;
                                                                               0;
                                                       Indels
                                                                  0;
                                                                      Gaps
            8 PR 9
Qy
              11
Db
            2 PR 3
RESULT 12
S32575
ribosomal protein S2, plastid - squawroot plastid (fragment)
C; Species: plastid Conopholis americana (squawroot)
C;Date: 19-Mar-1997 #sequence revision 25-Apr-1997 #text change 13-Aug-1999
C; Accession: S32575
R; Taylor, G.W.; Wolfe, K.H.; Morden, C.W.; dePamphilis, C.W.; Palmer, J.D.
Curr. Genet. 20, 515-518, 1991
A; Title: Lack of a functional plastid tRNA(Cys) gene is associated with loss of
photosynthesis in a lineage of parasitic plants.
A; Reference number: S32575; MUID: 92145776; PMID: 1723664
A; Accession: S32575
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-11 <TAY>
A; Cross-references: EMBL: X64567; NID: g11275; PIDN: CAA45868.1; PID: g11276
C; Genetics:
A; Gene: rps2
A; Genome: plastid
C; Superfamily: Escherichia coli ribosomal protein S2
C; Keywords: plastid; protein biosynthesis; ribosome
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
            2; Conservative
                                0; Mismatches
                                                  0;
                                                       Indels
                                                                  0; Gaps
                                                                               0;
            9 RR 10
Qу
              - 1 1
Db
            3 RR 4
RESULT 13
A57458
gene Gax protein - mouse (fragment)
C; Species: Mus sp. (mouse)
C;Date: 02-Jul-1996 #sequence revision 02-Jul-1996 #text change 15-Oct-1999
C; Accession: A57458
R; Andres, V.; Fisher, S.; Wearsch, P.; Walsh, K.
Mol. Cell. Biol. 15, 4272-4281, 1995
A; Title: Regulation of Gax homeobox gene transcription by a combination of
positive factors including myocyte-specific enhancer factor 2.
A; Reference number: A57458; MUID: 95349593; PMID: 7623821
A; Accession: A57458
A; Status: preliminary; translated from GB/EMBL/DDBJ
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```
A; Molecule type: DNA
A; Residues: 1-11 < RES>
A; Cross-references: GB: S79168; NID: g1050991
C; Genetics:
A; Gene: Gax
C; Superfamily: unassigned homeobox proteins; homeobox homology
C; Keywords: DNA binding; homeobox; nucleus; transcription regulation
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
             2; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
           10 RS 11
Qу
              \mathbf{I}
Db
           10 RS 11
RESULT 14
A61033
ranatachykinin A - bullfrog
C; Species: Rana catesbeiana (bullfrog)
C;Date: 31-Dec-1993 #sequence revision 31-Dec-1993 #text change 18-Aug-2000
C:Accession: A61033; JE0426
R; Kangawa, K.; Kozawa, H.; Hino, J.; Minamino, N.; Matsuo, H.
Regul. Pept. 42(Suppl.1), S12, 1992
A; Title: Isolation of four novel tachykinins from frog (Rana catesbeiana) brain
and intestine.
A; Reference number: A61033
A; Accession: A61033
A; Molecule type: protein
A; Residues: 1-11 <KAN>
R; Kozawa, H.; Hino, J.; Minamino, N.; Kangawa, K.; Matsuo, H.
Biochem. Biophys. Res. Commun. 177, 588-595, 1991
A; Title: Isolation of four novel tachykinins from frog (Rana catesbeiana) brain
and intestine.
A; Reference number: JE0426; MUID: 91254337; PMID: 2043143
A; Accession: JE0426
A; Molecule type: protein
A; Residues: 1-11 < KOZ>
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; neuropeptide
F;11/Modified site: amidated carboxyl end (Met) #status experimental
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                               0;
                                                                   0; Gaps
            7 KP 8
Qу
              \perp
            1 KP 2
Db
RESULT 15
D61033
ranatachykinin D - bullfrog
C; Species: Rana catesbeiana (bullfrog)
C; Date: 31-Dec-1993 #sequence revision 31-Dec-1993 #text change 18-Aug-2000
```

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C; Accession: D61033; JE0429
R; Kangawa, K.; Kozawa, H.; Hino, J.; Minamino, N.; Matsuo, H.
Regul. Pept. 42(Suppl.1), S12, 1992
A; Title: Isolation of four novel tachykinins from frog (Rana catesbeiana) brain
and intestine.
A; Reference number: A61033
A; Accession: D61033
A; Molecule type: protein
A; Residues: 1-11 <KAN>
R; Kozawa, H.; Hino, J.; Minamino, N.; Kangawa, K.; Matsuo, H.
Biochem. Biophys. Res. Commun. 177, 588-595, 1991
A; Title: Isolation of four novel tachykinins from frog (Rana catesbeiana) brain
and intestine.
A; Reference number: JE0426; MUID: 91254337; PMID: 2043143
A; Accession: JE0429
A; Molecule type: protein
A; Residues: 1-11 < KOZ>
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; neuropeptide
F;11/Modified site: amidated carboxyl end (Met) #status experimental
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
            2; Conservative
                                0; Mismatches
                                                    0;
                                                       Indels
                                                                               0;
Qу
            7 KP 8
              \perp
            1 KP 2
Db
RESULT 16
S42449
antl protein - phage P7
C; Species: phage P7
C;Date: 07-Sep-1994 #sequence revision 26-May-1995 #text change 08-Oct-1999
C; Accession: S42449
R; Citron, M.; Schuster, H.
Cell 62, 591-598, 1990
A; Title: The c4 repressors of bacteriophages P1 and P7 are antisense RNAs.
A; Reference number: S42448; MUID: 90335968; PMID: 1696181
A; Accession: S42449
A; Status: preliminary; translation not shown
A; Molecule type: DNA
A; Residues: 1-11 <CIT>
A; Cross-references: EMBL: M35139; NID: q215705; PIDN: AAA32437.1; PID: q215707
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
            2; Conservative
                                0; Mismatches
                                                    0;
                                                       Indels
                                                                               0;
            6 MK 7
Qу
              11
Db
            1 MK 2
```

RESULT 17 JQ0395

```
hypothetical protein (nodB 3' region) - Azorhizobium caulinodans
N; Alternate names: hypothetical 1.4K protein
C; Species: Azorhizobium caulinodans
A; Note: host Sesbania rostrata
C; Date: 07-Sep-1990 #sequence revision 07-Sep-1990 #text change 03-Feb-1994
C; Accession: JQ0395
R; Goethals, K.; Gao, M.; Tomekpe, K.; Van Montagu, M.; Holsters, M.
Mol. Gen. Genet. 219, 289-298, 1989
A:Title: Common nodABC genes in Nod locus 1 of Azorhizobium caulinodans:
nucleotide sequence and plant-inducible expression.
A; Reference number: JQ0393; MUID: 90136519; PMID: 2615763
A; Accession: JQ0395
A; Molecule type: DNA
A; Residues: 1-11 <GOE>
A; Cross-references: GB:L18897
A; Experimental source: strain ORS571
 Query Match
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 Best Local Similarity
                         100.0%; Pred. No. 2.6e+04;
            2; Conservative 0; Mismatches 0;
                                                      Indels
                                                                 0; Gaps
                                                                              0;
            1 AR 2
Qу
              11
Db
          10 AR 11
RESULT 18
PQ0231
beta-glucosidase (EC 3.2.1.21) - Cellvibrio gilvus (fragment)
C; Species: Cellvibrio gilvus
C;Date: 31-Mar-1992 #sequence revision 31-Mar-1992 #text change 07-May-1999
C; Accession: PQ0231
R; Kashiwagi, Y.; Iijima, C.; Sasaki, T.; Taniguchi, H.
Agric. Biol. Chem. 55, 2553-2559, 1991
A; Title: Characterization of a beta-glucosidase encoded by a gene from
Cellvibrio gilvus.
A; Reference number: PQ0231; MUID: 92144103; PMID: 1368758
A; Accession: PQ0231
A; Molecule type: protein
A; Residues: 1-11 <KAS>
C; Keywords: glycosidase; hydrolase; polysaccharide degradation
                          18.2%; Score 2; DB 2; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
                                                                              0;
 Matches
            2; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
            3 OK 4
Qу
              9 QK 10
Db
RESULT 19
S42587
celF protein - Escherichia coli (fragment)
C; Species: Escherichia coli
C;Date: 25-Dec-1994 #sequence_revision 10-Nov-1995 #text change 10-Nov-1995
C; Accession: S42587
```

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R; Guzzo, A.; DuBow, M.S.
Mol. Gen. Genet. 242, 455-460, 1994
A; Title: A luxAB transcriptional fusion to the cryptic celf gene of Escherichia
coli displays increased luminescence in the presence of nickel.
A; Reference number: S42587; MUID: 94166755; PMID: 8121401
A; Accession: S42587
A; Molecule type: DNA
A; Residues: 1-11 <GUZ>
C; Genetics:
A:Gene: celF
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
             2; Conservative
                                0; Mismatches
                                                                              0;
                                                    0; Indels
                                                                  0; Gaps
            8 PR 9
Qy
              Db
            9 PR 10
RESULT 20
B43669
hypothetical protein (rhdA 5' region) - Synechococcus sp. (fragment)
C; Species: Synechococcus sp.
C;Date: 03-Mar-1993 #sequence revision 03-Mar-1993 #text change 30-Sep-1993
C; Accession: B43669
R; Laudenbach, D.E.; Ehrhardt, D.; Green, L.; Grossman, A.
J. Bacteriol. 173, 2751-2760, 1991
A; Title: Isolation and characterization of a sulfur-regulated gene encoding a
periplasmically localized protein with sequence similarity to rhodanese.
A; Reference number: A43669; MUID: 91210163; PMID: 1708376
A; Accession: B43669
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-11 <LAU>
A; Cross-references: GB:M65244
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
             2; Conservative
                               0; Mismatches
                                                   0;
                                                                              0;
                                                       Indels
                                                                  0;
                                                                      Gaps
Qy
            2 RO 3
              \perp
Db
            9 RQ 10
RESULT 21
PC2372
58K heat shock protein groEL [similarity] - Bacillus cereus (strain ts-4)
C; Species: Bacillus cereus
C;Date: 20-Apr-2000 #sequence revision 20-Apr-2000 #text change 20-Apr-2000
C; Accession: PC2372
R; Matsuno, K.; Miyamoto, T.; Yamaguchi, K.; Sayed, M.A.; Kajiwara, T.; Hatano,
Biosci. Biotechnol. Biochem. 59, 231-235, 1995
```

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A; Title: Identification of DNA-binding proteins changed after induction of
sporulation in Bacillus cereus.
A; Reference number: PC2369; MUID: 95218265; PMID: 7766022
A; Accession: PC2372
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <MAS>
C; Keywords: heat shock; molecular chaperone; stress-induced protein
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
             2; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
Qу
            1 AR 2
              11
Db
           10 AR 11
RESULT 22
B41835
translation elongation factor EF-G homolog - Bacillus subtilis (fragment)
C; Species: Bacillus subtilis
C;Date: 30-Sep-1993 #sequence revision 30-Sep-1993 #text change 05-Dec-1997
C; Accession: B41835
R; Mitchell, C.; Morris, P.W.; Vary, J.C.
J. Bacteriol. 174, 2474-2477, 1992
A; Title: Identification of proteins phosphorylated by ATP during sporulation of
Bacillus subtilis.
A; Reference number: A41835; MUID: 92210489; PMID: 1556067
A; Accession: B41835
A; Molecule type: protein
A; Residues: 1-11 <MIT>
A; Note: this protein is phosphorylated during stationary phase but not during
exponential growth
C; Keywords: phosphoprotein
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
  Matches
                                0; Mismatches
             2; Conservative
                                                  0; Indels
                                                                  0; Gaps
                                                                              0;
            4 KT 5
Qу
              11
Db
            5 KT 6
RESULT 23
E41476
probable antigen 5 - Mycobacterium leprae (fragment)
C; Species: Mycobacterium leprae
C;Date: 10-Apr-1992 #sequence_revision 10-Apr-1992 #text_change 18-Jun-1993
C; Accession: E41476
R; Hartskeerl, R.A.; van Rens, R.M.; Stabel, L.F.E.M.; de Wit, M.Y.L.; Klatser,
P.R.
Infect. Immun. 58, 2821-2827, 1990
A; Title: Selection and characterization of recombinant clones that produce
Mycobacterium leprae antigens recognized by antibodies in sera from household
contacts of leprosy patients.
```

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A; Accession: E41476
A; Status: preliminary; not compared with conceptual translation
A; Molecule type: DNA
A; Residues: 1-11 <HAR>
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
             2; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
            8 PR 9
Qy
              \perp
            5 PR 6
Db
RESULT 24
S33519
probable secreted protein - Acholeplasma laidlawii (fragment)
C; Species: Acholeplasma laidlawii
C;Date: 06-Jan-1995 #sequence revision 06-Jan-1995 #text change 22-Oct-1999
C; Accession: S33519
R; Boyer, M.J.; Jarhede, T.K.; Tegman, V.; Wieslander, A.
submitted to the EMBL Data Library, June 1993
A; Description: Sequence regions from Acholeplasma laidlawii which restore export
of beta-lactamase in Escherichia coli.
A; Reference number: S33518
A; Accession: S33519
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-11 <BOY>
A; Cross-references: EMBL: Z22875; NID: g311706; PIDN: CAA80495.1; PID: g311708
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
             2; Conservative 0; Mismatches
                                                                  0;
                                                                               0;
                                                    0;
                                                       Indels
                                                                      Gaps
            6 MK 7
QУ
              +1
Db
            1 MK 2
RESULT 25
H54346
pyruvate synthase (EC 1.2.7.1) alpha chain - Pyrococcus furiosus (fragment)
C; Species: Pyrococcus furiosus
C;Date: 05-Jan-1996 #sequence revision 05-Jan-1996 #text change 05-May-2000
C; Accession: H54346
R; Blamey, J.M.; Adams, M.W.
Biochemistry 33, 1000-1007, 1994
A; Title: Characterization of an ancestral type of pyruvate ferredoxin
oxidoreductase from the hyperthermophilic bacterium, Thermotoga maritima.
A; Reference number: A54346; MUID: 94137707; PMID: 8305426
A; Accession: H54346
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <BLA>
C; Keywords: coenzyme A; oxidoreductase
```

A; Reference number: A41476; MUID: 90354041; PMID: 1696931

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Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
                                0; Mismatches
 Matches
            2; Conservative
                                                   0;
                                                       Indels
                                                                  0; Gaps
                                                                              0;
            6 MK 7
Qу
              ш
            3 MK 4
Db
RESULT 26
T06383
hypothetical protein - soybean
C; Species: Glycine max (soybean)
C;Date: 30-Apr-1999 #sequence revision 30-Apr-1999 #text change 11-May-2000
C; Accession: T06383
R; Dewey, R.E.; Wilson, R.F.; Novitzky, W.P.; Goode, J.H.
Plant Cell 6, 1495-1507, 1994
A; Title: The AAPT1 gene of soybean complements a cholinephosphotransferase-
deficient mutant of yeast.
A; Reference number: Z06169; MUID: 95086383; PMID: 7994181
A; Accession: T06383
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: mRNA
A; Residues: 1-11 < DEW>
A;Cross-references: EMBL:U12735; NID:g530086; PIDN:AAA67718.1; PID:g530087
A; Experimental source: strain Dare; seed
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
            2; Conservative
                                 0; Mismatches
                                                       Indels
                                                                  0; Gaps
                                                                              0;
                                                    0;
            6 MK 7
Qу
              11
Db
            1 MK 2
RESULT 27
JQ2307
hypothetical 1.5K protein - tomato chloroplast (strain Toko)
C; Species: chloroplast Lycopersicon esculentum (tomato)
C;Date: 10-Mar-1994 #sequence revision 28-Oct-1994 #text_change 23-Mar-1995
C; Accession: JQ2307
R; Kawagoe, Y.; Kikuta, Y.
Theor. Appl. Genet. 81, 13-20, 1991
A; Title: Chloroplast DNA evolution in potato (Solanum tuberosum L.).
A; Reference number: JQ2306
A; Accession: JQ2307
A; Molecule type: DNA
A; Residues: 1-11 <KAW>
A; Experimental source: strain Toko
C; Genetics:
A; Genome: chloroplast
C; Keywords: chloroplast
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 2.6e+04;
```

```
0; Gaps
                                                                               0;
  Matches
            2; Conservative
                                 0; Mismatches
                                                    0; Indels
            6 MK 7
Qу
Db
            1 MK 2
RESULT 28
JQ2317
hypothetical 1.5K protein - potato chloroplast
C; Species: chloroplast Solanum tuberosum (potato)
C; Date: 10-Mar-1994 #sequence revision 28-Oct-1994 #text change 05-Jan-1996
C; Accession: JQ2317; JQ2312
R; Kawagoe, Y.; Kikuta, Y.
Theor. Appl. Genet. 81, 13-20, 1991
A; Title: Chloroplast DNA evolution in potato (Solanum tuberosum L.).
A; Reference number: JQ2306
A; Accession: JQ2317
A; Molecule type: DNA
A; Residues: 1-11 <KW1>
A; Experimental source: cv. W553-4
A; Accession: JQ2312
A; Molecule type: DNA
A; Residues: 1-11 <KW2>
A; Experimental source: cv. 150
C; Genetics:
A; Genome: chloroplast
C; Keywords: chloroplast
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
                                                                               0;
  Matches
            2; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
            6 MK 7
Qу
              11
Db
            1 MK 2
RESULT 29
S78026
ribosomal protein YmL29, mitochondrial - yeast (Saccharomyces cerevisiae)
(fragment)
C; Species: Saccharomyces cerevisiae
C;Date: 09-Oct-1997 #sequence_revision 24-Oct-1997 #text change 14-Nov-1997
C; Accession: S78026
R; Kitakawa, M.; Graack, H.R.; Grohmann, L.; Goldschmidt-Reisin, S.; Herfurth,
E.; Wittmann-Liebold, B.; Nishimura, T.; Isono, K.
Eur. J. Biochem. 245, 449-456, 1997
A; Title: Identification and characterization of the genes for mitochondrial
ribosomal proteins of Saccharomyces cerevisiae.
A; Reference number: S78018; MUID: 97296414; PMID: 9151978
A; Accession: S78026
A; Molecule type: protein
A; Residues: 1-11 <KIT>
C; Genetics:
A; Genome: nuclear
C; Keywords: mitochondrion; protein biosynthesis; ribosome
```

```
18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
            2; Conservative
                                0; Mismatches
                                                   0;
                                                       Indels
                                                                  0; Gaps
                                                                              0;
            8 PR 9
Qу
              11
            8 PR 9
Db
RESULT 30
A34135
DNA-binding protein p - Crithidia fasciculata mitochondrion (fragment)
C; Species: mitochondrion Crithidia fasciculata
C;Date: 30-Sep-1991 #sequence revision 30-Sep-1991 #text change 07-Dec-1999
C; Accession: A34135
R; Tittawella, I.
FEBS Lett. 260, 57-61, 1990
A; Title: Kinetoplast DNA-aggregating proteins from the parasitic protozoan
Crithidia fasciculata.
A; Reference number: A34135
A; Accession: A34135
A; Molecule type: protein
A; Residues: 1-11 <TIT>
C; Genetics:
A; Genome: mitochondrion
A; Genetic code: SGC6
C; Keywords: mitochondrion
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
                               0; Mismatches '0;
                                                                              0;
  Matches
            2; Conservative
                                                       Indels
                                                                  0; Gaps
            8 PR 9
Qy
              11
            7 PR 8
Db
RESULT 31
A26120
6-phosphofructokinase (EC 2.7.1.11) - pig roundworm (fragment)
N; Alternate names: phosphofructokinase; phosphohexokinase
C; Species: Ascaris suum (pig roundworm)
C;Date: 15-Dec-1988 #sequence_revision 15-Dec-1988 #text change 28-Apr-1993
C; Accession: A26120
R; Kulkarni, G.; Rao, G.S.J.; Srinivasan, N.G.; Hofer, H.W.; Yuan, P.M.; Harris,
B.G.
J. Biol. Chem. 262, 32-34, 1987
A; Title: Ascaris suum phosphofructokinase. Phosphorylation by protein kinase and
sequence of the phosphopeptide.
A; Reference number: A26120; MUID: 87083467; PMID: 3025208
A; Accession: A26120
A; Molecule type: protein
A; Residues: 1-11 <KUL>
C; Keywords: glycolysis; phosphotransferase
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
```

```
100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
  Matches
             2; Conservative 0; Mismatches
                                                 0; Indels
                                                                  0; Gaps
                                                                              0;
           10 RS 11
Qy
              11
Db
            4 RS 5
RESULT 32
C37196
bradykinin-potentiating peptide 3 - island jararaca
C; Species: Bothrops insularis (island jararaca)
C; Date: 14-Feb-1992 #sequence revision 01-Dec-1992 #text change 05-Aug-1994
C; Accession: C37196
R; Cintra, A.C.O.; Vieira, C.A.; Giglio, J.R.
J. Protein Chem. 9, 221-227, 1990
A; Title: Primary structure and biological activity of bradykinin potentiating
peptides from Bothrops insularis snake venom.
A; Reference number: A37196; MUID: 90351557; PMID: 2386615
A; Accession: C37196
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <CIN>
C; Keywords: pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
 Matches
             2; Conservative
                                0; Mismatches
                                                   0;
                                                      Indels
                                                                      Gaps
                                                                              0;
            8 PR 9
Qу
              11
Dh.
            5 PR 6
RESULT 33
D37196
bradykinin-potentiating peptide 4 - island jararaca
C; Species: Bothrops insularis (island jararaca)
C; Date: 14-Feb-1992 #sequence revision 01-Dec-1992 #text change 05-Aug-1994
C; Accession: D37196
R; Cintra, A.C.O.; Vieira, C.A.; Giglio, J.R.
J. Protein Chem. 9, 221-227, 1990
A; Title: Primary structure and biological activity of bradykinin potentiating
peptides from Bothrops insularis snake venom.
A; Reference number: A37196; MUID: 90351557; PMID: 2386615
A; Accession: D37196
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <CIN>
C; Keywords: pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
  Matches
             2; Conservative
                              0; Mismatches
                                                   0;
                                                      Indels
                                                                  0; Gaps
                                                                              0;
```

```
8 PR 9
Qу
            5 PR 6
RESULT 34
PT0302
Ig heavy chain CRD3 region (clone 5-112) - human (fragment)
C; Species: Homo sapiens (man)
C; Date: 30-Sep-1993 #sequence revision 30-Sep-1993 #text change 16-Aug-1996
C; Accession: PT0302
R; Yamada, M.; Wasserman, R.; Reichard, B.A.; Shane, S.; Caton, A.J.; Rovera, G.
J. Exp. Med. 173, 395-407, 1991
A; Title: Preferential utilization of specific immunoglobulin heavy chain
diversity and joining segments in adult human peripheral blood B lymphocytes.
A; Reference number: PT0222; MUID: 91108337; PMID: 1899102
A; Accession: PT0302
A; Molecule type: DNA
A; Residues: 1-11 < YAM>
A; Experimental source: B lymphocyte
C; Keywords: heterotetramer; immunoglobulin
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
  Matches
            2; Conservative
                                 0; Mismatches
                                                    0;
                                                        Indels
                                                                       Gaps
                                                                               0;
            8 PR 9
Qу
              4 PR 5
Db
RESULT 35
I54193
Rhesus blood group CcEe protein - human (fragment)
C; Species: Homo sapiens (man)
C;Date: 06-Sep-1996 #sequence revision 06-Sep-1996 #text change 21-Jul-2000
C; Accession: I54193
R; Cherif-Zahar, B.; Le Van Kim, C.; Rouillac, C.; Raynal, V.; Cartron, J.P.;
Colin, Y.
Genomics 19, 68-74, 1994
A; Title: Organization of the gene (RHCE) encoding the human blood group RhCcEe
antigens and characterization of the promoter region.
A; Reference number: I54193; MUID: 94245182; PMID: 8188244
A; Accession: I54193
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <RES>
A; Cross-references: GB:S70456; NID:g546795; PIDN:AAD14061.1; PID:q4261761
C; Genetics:
A; Gene: GDB: RHCE
A; Cross-references: GDB: 229957; OMIM: 111700
A; Map position: 1p36.2-1p34
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
```

0; Mismatches

0;

Indels

0; Gaps

0;

Matches

2; Conservative

```
8 PR 9
Qу
              \perp
            6 PR 7
Db
RESULT 36
S68637
acetylcholinesterase (EC 3.1.1.7) P chain - bovine (fragment)
C; Species: Bos primigenius taurus (cattle)
C; Date: 04-Dec-1997 #sequence revision 04-Dec-1997 #text change 30-Jan-1998
C; Accession: S68637
R; Boschetti, N.; Brodbeck, U.
FEBS Lett. 380, 133-136, 1996
A; Title: The membrane anchor of mammalian brain acetylcholinesterase consists of
a single glycosylated protein of 22 kDa.
A; Reference number: S68637; MUID: 96181683; PMID: 8603722
A; Accession: S68637
A; Molecule type: protein
A; Residues: 1-11 <BOS>
A; Experimental source: brain
C; Keywords: carboxylic ester hydrolase; glycoprotein; membrane protein
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
            2;
                Conservative
                                 0; Mismatches
                                                    0;
                                                       Indels
                                                                   0;
                                                                       Gaps
                                                                               0;
            3 OK 4
Qу
              \perp
            3 QK 4
Db
RESULT 37
D56979
collagen alpha 1(II) chain - bovine (fragment)
N; Alternate names: collagen alpha 3(XI) chain
C; Species: Bos primigenius taurus (cattle)
C;Date: 03-Oct-1995 #sequence revision 03-Oct-1995 #text change 11-Jul-1997
C; Accession: D56979
R; Wu, J.J.; Eyre, D.R.
J. Biol. Chem. 270, 18865-18870, 1995
A; Title: Structural analysis of cross-linking domains in cartilage type XI
collagen. Insights on polymeric assembly.
A; Reference number: A56978; MUID: 95370194; PMID: 7642541
A; Accession: D56979
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <WUA>
C; Keywords: pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form 3(XI))
#status experimental
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
                                 0; Mismatches
  Matches
             2; Conservative
                                                   0;
                                                       Indels
                                                                   0; Gaps
                                                                               0;
            2 RQ 3
Qу
```

11

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RESULT 38
A33571
follistatin - bovine (fragment)
C; Species: Bos primigenius taurus (cattle)
C;Date: 09-Mar-1990 #sequence revision 09-Mar-1990 #text change 30-Sep-1993
C; Accession: A33571
R; Gospodarowicz, D.; Lau, K.
Biochem. Biophys. Res. Commun. 165, 292-298, 1989
A; Title: Pituitary follicular cells secrete both vascular endothelial growth
factor and follistatin.
A; Reference number: A33571; MUID: 90073725; PMID: 2590228
A; Accession: A33571
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <GOS>
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
             2; Conservative
                               0; Mismatches
                                                    0;
                                                        Indels
                                                                   0; Gaps
                                                                               0;
            2 RQ 3
Qу
              \mathbf{I}
Db
            6 RQ 7
RESULT 39
A14454
6-phosphofructokinase (EC 2.7.1.11) - sheep (fragment)
C; Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C;Date: 05-Jun-1987 #sequence revision 05-Jun-1987 #text change 28-Apr-1993
C; Accession: A14454
R; Fordyce, A.M.; Midwinter, G.G.; Moore, C.H.
Biochem. Soc. Trans. 7, 721-723, 1979
A; Title: The N-terminal amino acid sequence of sheep heart phosphofructokinase.
A; Reference number: A14454; MUID: 80004524; PMID: 157899
A; Accession: A14454
A; Molecule type: protein
A; Residues: 1-11 <FOR>
C; Keywords: glycolysis; phosphotransferase
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
             2; Conservative
                                 0; Mismatches
                                                                               0;
                                                    0; Indels
                                                                  0; Gaps
            4 KT 5
Qу
            9 KT 10
Db
RESULT 40
PH1632
Ig H chain V-D-J region (clone B-less 209) - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 02-Jun-1994 #sequence revision 02-Jun-1994 #text change 17-Mar-1999
```

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C; Accession: PH1632
R; Levinson, D.A.; Campos-Torres, J.; Leder, P.
J. Exp. Med. 178, 317-329, 1993
A; Title: Molecular characterization of transgene-induced immunodeficiency in B-
less mice using a novel quantitative limiting dilution polymerase chain reaction
method.
A; Reference number: PH1580; MUID: 93301609; PMID: 8315387
A; Accession: PH1632
A; Molecule type: DNA
A; Residues: 1-11 <LEV>
A; Experimental source: bone marrow pre-B lymphocyte
C; Keywords: immunoglobulin
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.6e+04;
                                                                   0; Gaps
                                                                                0:
            2; Conservative
                                  0; Mismatches
                                                     0; Indels
            1 AR 2
Qу
Db
            2 AR 3
RESULT 41
PH1600
Iq H chain V-D-J region (wild-type clone 310) - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 02-Jun-1994 #sequence_revision 02-Jun-1994 #text change 17-Mar-1999
C; Accession: PH1600
R;Levinson, D.A.; Campos-Torres, J.; Leder, P. J. Exp. Med. 178, 317-329, 1993
A; Title: Molecular characterization of transgene-induced immunodeficiency in B-
less mice using a novel quantitative limiting dilution polymerase chain reaction
method.
A; Reference number: PH1580; MUID: 93301609; PMID: 8315387
A; Accession: PH1600
A; Molecule type: DNA
A; Residues: 1-11 <LEV>
A; Experimental source: bone marrow pre-B lymphocyte
C; Keywords: immunoglobulin
  Query Match
                           18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 2.6e+04;
                                  0; Mismatches
                                                     0; Indels
                                                                                0;
  Matches
             2; Conservative
            1 AR 2
Qу
               11
            2 AR 3
RESULT 42
Iq H chain V-D-J region (wild-type clone 8) - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 02-Jun-1994 #sequence revision 02-Jun-1994 #text change 17-Mar-1999
C; Accession: PH1584
R; Levinson, D.A.; Campos-Torres, J.; Leder, P.
J. Exp. Med. 178, 317-329, 1993
```

```
A; Title: Molecular characterization of transgene-induced immunodeficiency in B-
less mice using a novel quantitative limiting dilution polymerase chain reaction
method.
A; Reference number: PH1580; MUID: 93301609; PMID: 8315387
A; Accession: PH1584
A; Molecule type: DNA
A; Residues: 1-11 <LEV>
A; Experimental source: bone marrow pre-B lymphocyte
C; Keywords: immunoglobulin
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
             2; Conservative
                                  0; Mismatches
                                                    0;
                                                       Indels
                                                                       Gaps
                                                                               0;
            1 AR 2
Qу
              \mathbf{I}
Db
            2 AR 3
RESULT 43
PT0214
T-cell receptor beta chain V-J region (4-1-L.6) - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 31-Dec-1991 #sequence revision 31-Dec-1991 #text change 30-May-1997
C; Accession: PT0214
R; Nakano, N.; Kikutani, H.; Nishimoto, H.; Kishimoto, T.
J. Exp. Med. 173, 1091-1097, 1991
A; Title: T cell receptor V gene usage of islet beta cell-reactive T cells is not
restricted in non-obese diabetic mice.
A; Reference number: PT0209; MUID: 91217621; PMID: 1902501
A; Accession: PT0214
A; Molecule type: mRNA
A; Residues: 1-11 < NAK>
C; Keywords: T-cell receptor
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
  Matches
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
            1 AR 2
Qу
              11
            3 AR 4
Db
RESULT 44
A49037
TcR gamma V-J region - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 21-Jan-1994 #sequence revision 18-Nov-1994 #text change 05-Nov-1999
C; Accession: A49037
R; Ezquerra, A.; Wilde, D.B.; McConnell, T.J.; Sturmhofel, K.; Valas, R.B.;
Shevach, E.M.; Coligan, J.E.
Eur. J. Immunol. 22, 491-498, 1992
A; Title: Mouse autoreactive gamma/delta T cells. II. Molecular characterization
of the T cell receptor.
A; Reference number: A49037; MUID: 92164730; PMID: 1311262
A; Accession: A49037
```

```
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-11 <EZQ>
A; Cross-references: GB:S90637; NID:g246288; PIDN:AAB21547.1; PID:g246289
A; Experimental source: dendritic epidermal T-cell lines
A; Note: sequence extracted from NCBI backbone (NCBIN:90637, NCBIP:90641)
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0:
           10 RS 11
Qу
            6 RS 7
Db
RESULT 45
PD0441
translation elongation factor TU-like protein P43, mitochondrial - mouse
(fragment)
C; Species: Mus musculus (house mouse)
C;Date: 21-Aug-1998 #sequence revision 21-Aug-1998 #text change 21-Aug-1998
C; Accession: PD0441
R; Kawakami, T.; Uchida, T.; Sakai, T.; Kamo, M.; Morimasa, T.; Tsugita, A.
submitted to JIPID, August 1998
A; Description: Proteome analysis of mouse brain.
A; Reference number: PD0441
A; Accession: PD0441
A; Molecule type: protein
A; Residues: 1-11 <KAW>
A; Experimental source: striatum
C; Keywords: mitochondrion
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
            2; Conservative
 Matches
                               0; Mismatches
                                                   0; Indels
                                                                              0.;
                                                                  0; Gaps
            4 KT 5
Qу
              Db
            6 KT 7
RESULT 46
I77447
urinary protein - mouse (fragment)
C; Species: Mus musculus (house mouse)
C;Date: 02-Aug-1996 #sequence revision 02-Aug-1996 #text change 05-Nov-1999
C; Accession: I77447; I77448
R; Held, W.A.; Gallagher, J.F.; Hohman, C.M.; Kuhn, N.J.; Sampsell, B.M.; Hughes,
R.G.
Mol. Cell. Biol. 7, 3705-3712, 1987
A; Title: Identification and characterization of functional genes encoding the
mouse major urinary proteins.
A; Reference number: I57627; MUID: 88065510; PMID: 2824995
A; Accession: I77447
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
```

```
A; Residues: 1-11 <RES>
A;Cross-references: GB:M17815; NID:q202301; PIDN:AAA40541.1; PID:q202302
A; Accession: I77448
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <RE2>
A; Cross-references: GB:M17816; NID:q202303; PIDN:AAA40542.1; PID:q202304
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
             2; Conservative 0; Mismatches
                                                                  0; Gaps
                                                                              0;
                                                   0; Indels
            6 MK 7
Qy
              11
Db
            1 MK 2
RESULT 47
PH0939
T-cell receptor beta chain V-D-J region (clone 10) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0939
R; Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0939
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: complete Freund's adjuvant-immunized lymph node
C; Keywords: T-cell receptor
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
                                0; Mismatches 0; Indels
             2; Conservative
                                                                  0; Gaps
                                                                              0;
            7 KP 8
Qy
              -11
            5 KP 6
Db
RESULT 48
PH0947
T-cell receptor beta chain V-D-J region (clone A2) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C; Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0947
R;Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0947
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
```

```
A; Experimental source: myelin basic protein fragment-reactive T-cell, recovered
from experimentally induced allergic encephalomyelitis
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
             2; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
            9 RR 10
Qy
              1 \perp
Db
            4 RR 5
RESULT 49
PH0919
T-cell receptor beta chain V-D-J region (isolate 5) - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 09-Oct-1992 #sequence revision 09-Oct-1992 #text change 30-May-1997
C; Accession: PH0919
R; Gold, D.P.; Offner, H.; Sun, D.; Wiley, S.; Vandenbark, A.A.; Wilson, D.B.
J. Exp. Med. 174, 1467-1476, 1991
A; Title: Analysis of T cell receptor beta chains in Lewis rats with experimental
allergic encephalomyelitis: conserved complementarity determining region 3.
A; Reference number: PH0891; MUID: 92078857; PMID: 1836012
A; Accession: PH0919
A; Molecule type: mRNA
A; Residues: 1-11 <GOL>
A; Experimental source: concanavalin A-activated lymphoblast
A; Note: the authors translated the codon CAG for residue 11 as Glu
C; Keywords: T-cell receptor
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
  Matches
             2; Conservative
                                0; Mismatches
                                                       Indels
                                                                               0;
                                                                      Gaps
            9 RR 10
Qу
              | |
            6 RR 7
Db
RESULT 50
T12264
cytochrome-c oxidase (EC 1.9.3.1) chain I - Laudakia caucasia mitochondrion
(fragment)
C; Species: mitochondrion Laudakia caucasia
C; Date: 23-Jul-1999 #sequence revision 23-Jul-1999 #text change 03-Aug-2001
C; Accession: T12264; T12267; T12270; T12273; T12276; T12279
R; Macey, J.R.; Schulte II, J.A.; Ananjeva, N.B.; Larson, A.; Rastegar-Pouyani,
N.; Shammakov, S.M.; Papenfuss, T.J.
Mol. Phylogenet. Evol. 10, 118-131, 1998
A; Title: Phylogenetic relationships among agamid lizards of the Laudakia
caucasia species group: Testing hypotheses of biogeographic fragmentation and an
area cladogram for the Iranian Plateau.
A; Reference number: Z17470; MUID: 98424476; PMID: 9751922
A; Accession: T12264
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
```

```
A; Residues: 1-11 <MAC1>
A; Cross-references: EMBL: AF028681; NID: q3641460; PIDN: AAC99596.1; PID: q3641463
A; Experimental source: specimen voucher CAS185010; California Academy of
Sciences, San Francisco
A; Accession: T12267
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <MAC2>
A; Cross-references: EMBL: AF028682; NID: q3641464; PIDN: AAC99599.1; PID: q3641467
A; Accession: T12270
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <MAC3>
A;Cross-references: EMBL:AF028683; NID:g3641468; PIDN:AAC99602.1; PID:g3641471
A; Accession: T12273
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <MAC4>
A; Cross-references: EMBL: AF028684; NID: g3641472; PIDN: AAC99605.1; PID: g3641475
A; Accession: T12276
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <MAC5>
A; Cross-references: EMBL: AF028686; NID: q3641480; PIDN: AAC99611.1; PID: q3641483
A; Accession: T12279
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <MAC6>
A; Cross-references: EMBL: AF028687; NID: g3641484; PIDN: AAC99614.1; PID: g3641487
C; Genetics:
A; Gene: COI
A; Genome: mitochondrion
C; Keywords: mitochondrion; oxidoreductase
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 2.6e+04;
  Matches
            2; Conservative 0; Mismatches 0; Indels
                                                                  0; Gaps
                                                                               0;
            5 TM 6
Qу
              Db
            3 TM 4
RESULT 51
T12253
cytochrome-c oxidase (EC 1.9.3.1) chain I - Laudakia erythrogastra mitochondrion
C; Species: mitochondrion Laudakia erythrogastra
C; Date: 23-Jul-1999 #sequence revision 23-Jul-1999 #text change 03-Aug-2001
C; Accession: T12253; T12257
R; Macey, J.R.; Schulte II, J.A.; Ananjeva, N.B.; Larson, A.; Rastegar-Pouyani,
N.; Shammakov, S.M.; Papenfuss, T.J.
Mol. Phylogenet. Evol. 10, 118-131, 1998
A; Title: Phylogenetic relationships among agamid lizards of the Laudakia
caucasia species group: Testing hypotheses of biogeographic fragmentation and an
area cladogram for the Iranian Plateau.
A; Reference number: Z17470; MUID: 98424476; PMID: 9751922
```

```
A; Accession: T12253
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <MAC1>
A;Cross-references: EMBL:AF028679; NID:g3641452; PIDN:AAC99590.1; PID:g3641455
A; Experimental source: specimen voucher CAS182954; California Academy of
Sciences, San Francisco
A: Accession: T12257
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <MAC2>
A;Cross-references: EMBL:AF028680; NID:g3641456; PIDN:AAC99593.1; PID:g3641459
A; Experimental source: specimen voucher CAS184400; California Academy of
Sciences, San Francisco
C; Genetics:
A:Gene: COI
A; Genome: mitochondrion
C; Keywords: mitochondrion; oxidoreductase
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.6e+04;
  Matches
            2; Conservative 0; Mismatches
                                                   0; Indels
                                                                  0;
                                                                      Gaps
                                                                              0;
            5 TM 6
Qу
              \perp
Dh
            3 TM 4
RESULT 52
T12244
cytochrome-c oxidase (EC 1.9.3.1) chain I - Laudakia lehmanni mitochondrion
C; Species: mitochondrion Laudakia lehmanni
C;Date: 23-Jul-1999 #sequence_revision 23-Jul-1999 #text change 03-Aug-2001
C; Accession: T12244
R; Macey, J.R.; Schulte II, J.A.; Ananjeva, N.B.; Larson, A.; Rastegar-Pouyani,
N.; Shammakov, S.M.; Papenfuss, T.J.
Mol. Phylogenet. Evol. 10, 118-131, 1998
A; Title: Phylogenetic relationships among agamid lizards of the Laudakia
caucasia species group: Testing hypotheses of biogeographic fragmentation and an
area cladogram for the Iranian Plateau.
A: Reference number: Z17470; MUID: 98424476; PMID: 9751922
A; Accession: T12244
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <MAC>
A;Cross-references: EMBL:AF028677; NID:g3641444; PID:g3641447; PIDN:AAC99584.1
A; Experimental source: specimen voucher CAS183009; California Academy of
Sciences, San Francisco
C; Genetics:
A; Gene: COI
A; Genome: mitochondrion
C; Keywords: mitochondrion; oxidoreductase
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 2.6e+04;
            2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0;
                                                                      Gaps
                                                                              0;
```

```
5 TM 6
Qу
              11
            3 TM 4
Db
RESULT 53
T12248
cytochrome-c oxidase (EC 1.9.3.1) chain I - Laudakia microlepis mitochondrion
(fragment)
C; Species: mitochondrion Laudakia microlepis
C;Date: 23-Jul-1999 #sequence revision 23-Jul-1999 #text change 03-Aug-2001
C; Accession: T12248
R;Macey, J.R.; Schulte II, J.A.; Ananjeva, N.B.; Larson, A.; Rastegar-Pouyani,
N.; Shammakov, S.M.; Papenfuss, T.J.
Mol. Phylogenet. Evol. 10, 118-131, 1998
A; Title: Phylogenetic relationships among agamid lizards of the Laudakia
caucasia species group: Testing hypotheses of biogeographic fragmentation and an
area cladogram for the Iranian Plateau.
A; Reference number: Z17470; MUID: 98424476; PMID: 9751922
A; Accession: T12248
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <MAC>
A;Cross-references: EMBL:AF028678; NID:g3641448; PID:g3641451; PIDN:AAC99587.1
A; Experimental source: specimen voucher GNM. RE. ex.-P120; Goteborg Natural
History Museum Reptilia Exotica, Goteborg, Sweden
C; Genetics:
A; Gene: COI
A; Genome: mitochondrion
C; Keywords: mitochondrion; oxidoreductase
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
                                                                      Gaps
                                                                               0;
             2; Conservative
                               0; Mismatches
                                                    0; Indels
  Matches
            5 TM 6
Qу
              11
Db
            3 TM 4
RESULT 54
T17078
cytochrome-c oxidase (EC 1.9.3.1) chain I - Physignathus cocincinus
mitochondrion (fragment)
C; Species: mitochondrion Physignathus cocincinus
C; Date: 15-Oct-1999 #sequence revision 15-Oct-1999 #text change 22-Oct-1999
C; Accession: T17078
R; Macey, J.R.; Larson, A.; Ananjeva, N.B.; Papenfuss, T.J.
J. Mol. Evol. 44, 660-674, 1997
A; Title: Evolutionary shifts in three major structural features of the
mitochondrial genome among iguanian lizards.
A; Reference number: Z18674; MUID: 97315309; PMID: 9169559
A; Accession: T17078
A; Status: preliminary; translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 <MAC>
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A; Cross-references: EMBL: U82690; NID: q3603140; PID: q3603143; PIDN: AAC62296.1
C: Genetics:
A; Genome: mitochondrion
A; Note: COI
C; Keywords: mitochondrion; oxidoreductase
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
  Matches
            2; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
                                                                               0;
            5 TM 6
Qv
              \mathbf{I}
            3 TM 4
Db
RESULT 55
S60294
tubulin 2 beta-3 chain - fruit fly (Drosophila melanogaster) (fragment)
C; Species: Drosophila melanogaster
C;Date: 19-Jul-1996 #sequence revision 26-Jul-1996 #text change 21-Jun-2002
C; Accession: S60294
R; Chapel, S.; Sobrier, M.L.; Montpied, P.; Micard, D.; Bruhat, A.; Couderc,
J.L.; Dastugue, B.
Insect Mol. Biol. 2, 39-48, 1993
A; Title: In Drosophila Kc cells 20-OHE induction of the 60C beta-3 tubulin gene
expression is a primary transcriptional event.
A; Reference number: S60292; MUID: 97242543; PMID: 9087542
A; Accession: S60294
A; Molecule type: mRNA
A; Residues: 1-11 < CHA>
A; Cross-references: EMBL:X60393
C; Genetics:
A; Gene: FlyBase: beta-Tub60D
A; Cross-references: FlyBase: FBqn0003888
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 2.6e+04;
  Best Local Similarity
             2; Conservative 0; Mismatches
                                                   0; Indels
                                                                   0; Gaps
                                                                               0;
           10 RS 11
Qу
              - 1 1
Db
            6 RS 7
RESULT 56
I54081
retinoic acid receptor alpha, exon 3 (mistranslated) - human (fragment)
C; Species: Homo sapiens (man)
C;Date: 04-Jun-1999 #sequence revision 04-Jun-1999 #text change 28-Jun-1999
C; Accession: I54081
R; Dong, S.; Geng, J.P.; Tong, J.H.; Wu, Y.; Cai, J.R.; Sun, G.L.; Chen, S.R.;
Wang, Z.Y.; Larsen, C.J.; Berger, R.
Genes Chromosomes Cancer 6, 133-139, 1993
A; Title: Breakpoint clusters of the PML gene in acute promyelocytic leukemia:
primary structure of the reciprocal products of the PML-RARA gene in a patient
with t(15;17).
A; Reference number: 154081; MUID: 93222087; PMID: 7682097
```

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A; Status: translated from GB/EMBL/DDBJ
A; Molecule type: DNA
A; Residues: 1-11 < DON>
A; Cross-references: GB: S57794; NID: q299073; PIDN: AAD13888.1; PID: q4261588
A; Note: the translation is from an incorrect reading frame
C; Genetics:
A; Gene: GDB: RARA
A; Cross-references: GDB:120337; OMIM:180240
A; Map position: 17q12-17q12
                          18.2%; Score 2; DB 4; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 2.6e+04;
                                 0; Mismatches
                                                                  0; Gaps
                                                    0; Indels
                                                                              0;
  Matches
             2; Conservative
Qy
            8 PR 9
              11
Db
            4 PR 5
RESULT 57
XAVIBH
bradykinin-potentiating peptide - halys viper
N; Alternate names: BPP
C; Species: Agkistrodon halys (halys viper)
C; Date: 30-Sep-1988 #sequence revision 30-Sep-1988 #text_change 05-Aug-1994
C; Accession: JC0002
R; Chi, C.W.; Wang, S.Z.; Xu, L.G.; Wang, M.Y.; Lo, S.S.; Huang, W.D.
Peptides 6, 339-342, 1985
A; Title: Structure-function studies on the bradykinin potentiating peptide from
Chinese snake venom (Agkistrodon halys Pallas).
A; Reference number: JC0002; MUID: 86177022; PMID: 3008123
A; Accession: JC0002
A; Molecule type: protein
A; Residues: 1-11 <CHI>
C; Comment: Because this peptide both inhibits the activity of the angiotensin-
converting enzyme and enhances the action of bradykinin, it is an
antihypertensive agent.
C; Superfamily: bradykinin-potentiating peptide
C; Keywords: angiotensin-converting enzyme inhibitor; antihypertensive;
bradykinin; pyroglutamic acid; venom
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity 100.0%; Pred. No. 2.1e+05;
             1; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                               0;
            3 Q 3
Qу
            1 0 1
RESULT 58
ECLQ2M
tachykinin II - migratory locust
C; Species: Locusta migratoria (migratory locust)
C; Date: 31-Dec-1991 #sequence revision 31-Dec-1991 #text change 08-Dec-1995
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A; Accession: I54081

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C; Accession: S08266
R; Schoofs, L.; Holman, G.M.; Hayes, T.K.; Nachman, R.J.; de Loof, A.
FEBS Lett. 261, 397-401, 1990
A:Title: Locustatachykinin I and II, two novel insect neuropeptides with
homology to peptides of the vertebrate tachykinin family.
A; Reference number: S08265; MUID: 90184489; PMID: 2311766
A:Accession: S08266
A; Molecule type: protein
A; Residues: 1-11 <SCH>
C; Superfamily: tachykinin
C; Keywords: amidated carboxyl end; neuropeptide; tachykinin
F:11/Modified site: amidated carboxyl end (Arg) #status experimental
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  Best Local Similarity
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                                                                  0; Gaps
                                                                              0;
            1 A 1
Qу
Db
            1 A 1
RESULT 59
EOOCC
eledoisin - curled octopus
C; Species: Eledone cirrosa, Ozaena cirrosa (curled octopus)
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text change 20-Mar-1998
C; Accession: B01561; A01561
R; Anastasi, A.; Erspamer, V.
Arch. Biochem. Biophys. 101, 56-65, 1963
A; Title: The isolation and amino acid sequence of eledoisin, the active
endecapeptide of the posterior salivary glands of Eledone.
A; Reference number: A01561
A; Accession: B01561
A; Molecule type: protein
A; Residues: 1-11 <ANA>
C; Superfamily: substance P precursor
C; Keywords: amidated carboxyl end; hormone; pyroglutamic acid; salivary gland;
secretagogue; vasodilator; venom
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 2.1e+05;
                                                                              0;
                                                                  0; Gaps
  Matches
             1; Conservative
                                0; Mismatches
                                                   0; Indels
            3 Q 3
Qу
            1 0 1
Db
RESULT 60
EOOC
eledoisin - musky octopus
C; Species: Eledone moschata, Ozaena moschata (musky octopus)
C;Date: 13-Jul-1981 #sequence revision 13-Jul-1981 #text change 20-Mar-1998
C:Accession: A01561
```

```
Arch. Biochem. Biophys. 101, 56-65, 1963
A; Title: The isolation and amino acid sequence of eledoisin, the active
endecapeptide of the posterior salivary glands of Eledone.
A; Reference number: A01561
A; Accession: A01561
A; Molecule type: protein
A; Residues: 1-11 < ANA>
C; Superfamily: substance P precursor
C; Keywords: amidated carboxyl end; hormone; pyroglutamic acid; salivary gland;
secretagogue; vasodilator; venom
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
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                               0; Mismatches
                                                                  0; Gaps
                                                                              0;
            3 Q 3
Qу
              1 Q 1
Db
RESULT 61
GMROL
leucosulfakinin - Madeira cockroach
N; Alternate names: LSK
C; Species: Leucophaea maderae (Madeira cockroach)
C; Date: 17-Mar-1987 #sequence revision 17-Mar-1987 #text change 13-Sep-1996
C; Accession: A01622
R; Nachman, R.J.; Holman, G.M.; Haddon, W.F.; Ling, N.
Science 234, 71-73, 1986
A; Title: Leucosulfakinin, a sulfated insect neuropeptide with homology to
gastrin and cholecystokinin.
A; Reference number: A01622; MUID: 86315858; PMID: 3749893
A; Accession: A01622
A; Molecule type: protein
A; Residues: 1-11 <NAC>
C; Superfamily: gastrin
C; Keywords: amidated carboxyl end; hormone; sulfoprotein
F;6/Binding site: sulfate (Tyr) (covalent) #status experimental
F;11/Modified site: amidated carboxyl end (Phe) #status experimental
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                                                                              0;
            3 Q 3
Qу
            2 Q 2
RESULT 62
LFTWWE
probable trpEG leader peptide - Thermus aquaticus
C; Species: Thermus aquaticus
C;Date: 30-Jun-1991 #sequence revision 30-Jun-1991 #text change 16-Jul-1999
```

R; Anastasi, A.; Erspamer, V.

```
R; Sato, S.; Nakada, Y.; Kanaya, S.; Tanaka, T.
Biochim. Biophys. Acta 950, 303-312, 1988
A; Title: Molecular cloning and nucleotide sequence of Thermus thermophilus HB8
trpE and trpG.
A; Reference number: S03315; MUID: 89000781; PMID: 2844259
A: Accession: S03315
A; Molecule type: DNA
A; Residues: 1-11 <SAT>
A; Cross-references: EMBL: X07744; NID: q48261; PIDN: CAA30565.1; PID: q48262
A; Note: the source is designated as Thermus thermophilus HB8
C; Genetics:
A; Gene: trpL
C; Superfamily: probable trpEG leader peptide
  Ouery Match
                           9.1%; Score 1; DB 1; Length 11;
                          100.0%; Pred. No. 2.1e+05;
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            1; Conservative
                               0; Mismatches
                                                  0; Indels
                                                                  0; Gaps
                                                                              0:
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Qу
Db
            1 M 1
RESULT 63
S66196
alcohol dehydrogenase (EC 1.1.1.1) class III high affinity form - cod (Gadus
sp.) (fragment)
C; Species: Gadus sp. (cod)
C;Date: 14-Feb-1997 #sequence revision 13-Mar-1997 #text change 12-Jun-1998
C; Accession: S66196
R; Hjelmqvist, L.; Hackett, M.; Shafqat, J.; Danielsson, O.; Iida, J.;
Hendrickson, R.C.; Michel, H.; Shabanowitz, J.; Hunt, D.F.; Joernvall, H.
FEBS Lett. 367, 237-240, 1995
A; Title: Multiplicity of N-terminal structures of medium-chain alcohol
dehydrogenases. Mass-spectrometric analysis of plant, lower vertebrate and
higher vertebrate class I, II, and III forms of the enzyme.
A; Reference number: S66191; MUID: 95331382; PMID: 7607314
A; Accession: S66196
A; Molecule type: protein
A; Residues: 1-11 <HJE>
C; Superfamily: alcohol dehydrogenase; long-chain alcohol dehydrogenase homology
C; Keywords: alcohol metabolism; NAD; oxidoreductase
                           9.1%; Score 1; DB 2; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 2.1e+05;
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             1; Conservative
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                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
            5 T 5
Qy
              -1
Db
            1 T 1
RESULT 64
S68392
H+-transporting two-sector ATPase (EC 3.6.3.14) chain I - Chlamydomonas
reinhardtii chloroplast (fragment)
```

C; Accession: S03315

```
N; Alternate names: ATP synthase chain I
C; Species: chloroplast Chlamydomonas reinhardtii
C;Date: 04-Dec-1997 #sequence revision 12-Dec-1997 #text_change 03-Jun-2002
C; Accession: S68392
R; Fiedler, H.R.; Schmid, R.; Leu, S.; Shavit, N.; Strotmann, H.
FEBS Lett. 377, 163-166, 1995
A; Title: Isolation of CF(0)CF(1) from Chlamydomonas reinhardtii cw15 and the N-
terminal amino acid sequences of the CF(0)CF(1) subunits.
A; Reference number: S68388; MUID: 96128220; PMID: 8543042
A; Accession: S68392
A; Molecule type: protein
A; Residues: 1-11 <FIE>
A; Experimental source: strain CW15
C; Genetics:
A; Genome: chloroplast
C; Superfamily: H+-transporting ATP synthase protein 6
C; Keywords: ATP biosynthesis; chloroplast; hydrolase; membrane-associated
complex; thylakoid
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                               0; Mismatches
                                                    0; Indels
  Matches
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Qу
            6 Q 6
Db
RESULT 65
B49164
chromogranin-B - rat (fragment)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 19-Dec-1993 #sequence_revision 18-Nov-1994 #text change 31-Oct-1997
C; Accession: B49164
R; Nielsen, E.; Welinder, B.S.; Madsen, O.D.
Endocrinology 129, 3147-3156, 1991
A; Title: Chromogranin-B, a putative precursor of eight novel rat glucagonoma
peptides through processing at mono-, di-, or tribasic residues.
A; Reference number: A49164; MUID: 92063871; PMID: 1954895
A:Accession: B49164
A; Status: preliminary
A; Molecule type: protein
A; Residues: 1-11 <NIE>
A; Note: sequence extracted from NCBI backbone (NCBIP: 66370)
C; Superfamily: chromogranin B precursor
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Qy
            1 P 1
Db
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RESULT 66 A40693

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transgelin - sheep (fragment)
C; Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
C;Date: 03-May-1994 #sequence revision 03-May-1994 #text change 31-Oct-1997
C; Accession: A40693
R; Shapland, C.; Hsuan, J.J.; Totty, N.F.; Lawson, D.
J. Cell Biol. 121, 1065-1073, 1993
A; Title: Purification and properties of transgelin: a transformation and shape
change sensitive actin-gelling protein.
A; Reference number: A40693; MUID: 93273790; PMID: 8501116
A; Accession: A40693
A; Molecule type: protein
A; Residues: 1-11 <SHA>
A; Experimental source: aorta
C; Comment: This protein gels actin and is down regulated by transformation or
loss of cell adherence in culture.
C:Superfamily: smooth muscle protein SM22; calponin repeat homology; smooth
muscle protein SM22 homology
C; Keywords: actin binding; cytoskeleton
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                                                       Indels
                                                                      Gaps
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Qу
              1
Db
            1 K 1
RESULT 67
A38841
rhodopsin homolog - squid (Watasenia scintillans) (fragment)
N; Alternate names: visual pigment protein
C; Species: Watasenia scintillans (sparkling enope)
C;Date: 17-Jul-1992 #sequence revision 17-Jul-1992 #text change 31-Oct-1997
C; Accession: A38841
R; Seidou, M.; Kubota, I.; Hiraki, K.; Kito, Y.
Biochim. Biophys. Acta 957, 318-321, 1988
A; Title: Amino acid sequence of the retinal binding site of squid visual
pigment.
A; Reference number: PT0063; MUID: 89051045; PMID: 3191148
A; Accession: A38841
A; Molecule type: protein
A; Residues: 1-11 <SEI>
C; Superfamily: vertebrate rhodopsin
C; Keywords: chromoprotein; retinal
F;3/Binding site: retinal (Lys) (covalent) #status experimental
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  Query Match
                          100.0%; Pred. No. 2.1e+05;
  Best Local Similarity
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             1; Conservative
                                 0; Mismatches
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            1 A 1
Qу
            2 A 2
Db
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```
PO0682
photosystem I 17.5K D2 chain - common tobacco (fragment)
C; Species: Nicotiana tabacum (common tobacco)
C;Date: 19-May-1994 #sequence revision 19-May-1994 #text change 17-Mar-1999
C; Accession: PQ0682
R; Obokata, J.; Mikami, K.; Hayashida, N.; Nakamura, M.; Sugiura, M.
Plant Physiol. 102, 1259-1267, 1993
A; Title: Molecular heterogeneity of photosystem I. psaD, psaE, psaF, psaH and
psaL are all present in isoforms in Nicotiana spp.
A; Reference number: PQ0667; MUID: 94105345; PMID: 8278548
A; Accession: PQ0682
A; Molecule type: protein
A; Residues: 1-11 <OBO>
C; Superfamily: photosystem I chain II
C; Keywords: chloroplast; photosynthesis; photosystem I; thylakoid
  Query Match '
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                          100.0%; Pred. No. 2.1e+05;
  Best Local Similarity
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                                                  0; Indels
                                                                0; Gaps
                                                                              0;
            1; Conservative
            1 A 1
Qу
            1 A 1
Db
RESULT 69
S00616
parasporal crystal protein, wax moth-specific - Bacillus thuringiensis (strain
galleriae 11-67) (fragment)
N; Alternate names: delta-endotoxin; parasporal crystal protein positive chain
C; Species: Bacillus thuringiensis
C;Date: 31-Dec-1988 #sequence revision 31-Dec-1988 #text change 13-Sep-1996
C; Accession: S00616
R; Chestukhina, G.G.; Kostina, L.I.; Zalunin, I.A.; Khodova, O.M.; Stepanov, V.M.
FEBS Lett. 232, 249-251, 1988
A; Title: Bacillus thuringiensis ssp. galleriae simultaneously produces two
delta-endotoxins differing strongly in primary structure and entomocidal
activity.
A; Reference number: S00615
A; Accession: S00616
A; Molecule type: protein
A; Residues: 1-11 <CHE>
C; Comment: This toxin is effective against the larvae of Galleria melonella
(greater wax moth) but not those of Lymantria dispar (gypsy moth).
C; Superfamily: parasporal crystal protein
C; Keywords: delta-endotoxin
                           9.1%; Score 1; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 2.1e+05;
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Qу
Db
            2 P 2
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C53652
rhlR protein - Pseudomonas aeruginosa (fragment)
C; Species: Pseudomonas aeruginosa
C;Date: 21-Jul-1995 #sequence revision 28-Jul-1995 #text_change 21-Aug-1998
C; Accession: C53652
R;Ochsner, U.A.; Fiechter, A.; Reiser, J.
J. Biol. Chem. 269, 19787-19795, 1994
A; Title: Isolation, characterization, and expression in Escherichia coli of the
Pseudomonas aeruginosa rhlAB genes encoding a rhamnosyltransferase involved in
rhamnolipid biosurfactant synthesis.
A; Reference number: A53652; MUID: 94327521; PMID: 8051059
A; Accession: C53652
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-11 <OCH>
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C; Superfamily: sdiA regulatory protein
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Qy
              - [
            1 M 1
Db
RESULT 71
S09074
cytochrome P450-4b - rat (fragment)
N; Alternate names: cytochrome P450K-5
N; Contains: oxidoreductase (EC 1.-.-.)
C; Species: Rattus norvegicus (Norway rat)
C;Date: 23-Apr-1993 #sequence_revision 23-Apr-1993 #text change 05-Mar-1999
C; Accession: S09074
R; Imaoka, S.; Terano, Y.; Funae, Y.
Arch. Biochem. Biophys. 278, 168-178, 1990
A; Title: Changes in the amount of cytochrome P450s in rat hepatic microsomes
with starvation.
A; Reference number: S09072; MUID: 90210577; PMID: 2321956
A; Accession: S09074
A; Molecule type: protein
A; Residues: 1-11 < IMA>
C; Superfamily: unassigned cytochrome P450; cytochrome P450 homology
C; Keywords: heme; microsome; monooxygenase; oxidoreductase; transmembrane
protein
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  Matches
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Qу
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Db
            4 P 4
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A26930
ermG leader peptide 1 - Bacillus sphaericus
C; Species: Bacillus sphaericus
C;Date: 08-Mar-1989 #sequence revision 08-Mar-1989 #text change 24-Sep-1999
C:Accession: A26930
R; Monod, M.; Mohan, S.; Dubnau, D.
J. Bacteriol. 169, 340-350, 1987
A; Title: Cloning and analysis of ermG, a new macrolide-lincosamide-streptogramin
B resistance element from Bacillus sphaericus.
A; Reference number: A91840; MUID: 87083389; PMID: 3025178
A; Accession: A26930
A; Molecule type: DNA
A; Residues: 1-11 <MON>
A; Cross-references: GB: M15332; NID: g142881; PIDN: AAA22417.1; PID: g142882
C; Superfamily: unassigned leader peptides
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                                                  0; Indels
                                                                  0; Gaps
                                                                              0;
             1; Conservative
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Qу
            1 M 1
RESULT 73
D60409
kassinin-like peptide K-III - frog (Pseudophryne guentheri)
C; Species: Pseudophryne guentheri
C;Date: 30-Jan-1993 #sequence revision 30-Jan-1993 #text change 02-Sep-2000
C; Accession: D60409
R; Simmaco, M.; Severini, C.; De Biase, D.; Barra, D.; Bossa, F.; Roberts, J.D.;
Melchiorri, P.; Erspamer, V.
Peptides 11, 299-304, 1990
A; Title: Six novel tachykinin- and bombesin-related peptides from the skin of
the Australian frog Pseudophryne guentheri.
A; Reference number: A60409; MUID: 90287814; PMID: 2356157
A; Accession: D60409
A; Molecule type: protein
A; Residues: 1-11 <SIM>
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; pyroglutamic acid
F; 1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
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            3 Q 3
Qу
Db
            1 Q 1
RESULT 74
F60409
substance P-like peptide II - frog (Pseudophryne guentheri)
```

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C; Species: Pseudophryne guentheri
C;Date: 30-Jan-1993 #sequence revision 30-Jan-1993 #text change 02-Sep-2000
C:Accession: F60409
R; Simmaco, M.; Severini, C.; De Biase, D.; Barra, D.; Bossa, F.; Roberts, J.D.;
Melchiorri, P.; Erspamer, V.
Peptides 11, 299-304, 1990
A; Title: Six novel tachykinin- and bombesin-related peptides from the skin of
the Australian frog Pseudophryne guentheri.
A; Reference number: A60409; MUID: 90287814; PMID: 2356157
A; Accession: F60409
A; Molecule type: protein
A; Residues: 1-11 <SIM>
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
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                Conservative
             1;
            3 Q 3
Qу
            1 Q 1
Db
RESULT 75
E60409
substance P-like peptide I - frog (Pseudophryne guentheri)
C:Species: Pseudophryne quentheri
C;Date: 30-Jan-1993 #sequence revision 30-Jan-1993 #text change 02-Sep-2000
C; Accession: E60409
R; Simmaco, M.; Severini, C.; De Biase, D.; Barra, D.; Bossa, F.; Roberts, J.D.;
Melchiorri, P.; Erspamer, V.
Peptides 11, 299-304, 1990
A; Title: Six novel tachykinin- and bombesin-related peptides from the skin of
the Australian frog Pseudophryne guentheri.
A; Reference number: A60409; MUID: 90287814; PMID: 2356157
A; Accession: E60409
A; Molecule type: protein
A; Residues: 1-11 <SIM>
C; Superfamily: unassigned animal peptides
C; Keywords: amidated carboxyl end; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status experimental
F;11/Modified site: amidated carboxyl end (Met) #status experimental
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  Best Local Similarity
                                                                               0;
                                0; Mismatches
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             1; Conservative
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  Matches
            3 Q 3
Qу
              ł
Db
            1 Q 1
Search completed: April 8, 2004, 15:49:26
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Job time : 9.61538 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 8, 2004, 15:47:33; Search time 30.3077 Seconds

(without alignments)

95.432 Million cell updates/sec

Title: US-09-787-443A-12

Perfect score: 11

Sequence: 1 ARQKTMKPRRS 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1073127 segs, 262937947 residues

Word size:

Total number of hits satisfying chosen parameters: 9223

Minimum DB seq length: 11 Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Database: Published Applications AA:*

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2: /cgn2 6/ptodata/1/pubpaa/PCT NEW PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

5: /cgn2 6/ptodata/1/pubpaa/US07 NEW PUB.pep:*

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12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*

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18: /cgn2 6/ptodata/1/pubpaa/US60 PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

용

Result Query

No. Score Match Length DB ID

Description

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                                                           Sequence 6, Appli
 2
         3
             27.3
                       11
                          8
                              US-08-801-405B-6
 3
         3
             27.3
                                                           Sequence 2, Appli
                       11
                           8
                              US-08-996-470-2
         3
             27.3
                          9
                              US-09-729-402-3
                                                           Sequence 3, Appli
 4
                       11
 5
         3
             27.3
                          9
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ALIGNMENTS

RESULT 1

US-09-832-355A-8

- ; Sequence 8, Application US/09832355A; Publication No. US20030027751A1
- ; GENERAL INFORMATION:
- ; APPLICANT: Kovesdi, Imre
- ; APPLICANT: Kessler, Paul
- ; TITLE OF INVENTION: VEGF FUSION PROTEINS

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FILE REFERENCE: 205654
  CURRENT APPLICATION NUMBER: US/09/832,355A
 CURRENT FILING DATE: 2001-04-10
 NUMBER OF SEQ ID NOS: 126
 SOFTWARE: PatentIn version 3.0
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   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-832-355A-8
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US-08-801-405B-6
; Sequence 6, Application US/08801405B
; Publication No. US20020019008A1
    GENERAL INFORMATION:
         APPLICANT: ROUGEOT, Catherine
                    ROUGEON, Francois
         TITLE OF INVENTION: THERAPEUTIC USE OF THE SMR1 PROTEIN, THE
                             SMR1 MATURATION PRODUCTS, SPECIFICALLY THE QHNPR
                             PENTAPEPTIDE AS WELL AS ITS BIOLOGICALLY ACTIVE
                             DERIVATIVES
         NUMBER OF SEQUENCES: 12
         CORRESPONDENCE ADDRESS:
              ADDRESSEE: BURNS, DOANE, SWECKER & MATHIS, L.L.P.
              STREET: P.O. Box 1404
              CITY: Alexandria
              STATE: Virginia
              COUNTRY: United States
              ZIP: 22313-1404
         COMPUTER READABLE FORM:
              MEDIUM TYPE: Floppy disk
              COMPUTER: IBM PC compatible
              OPERATING SYSTEM: PC-DOS/MS-DOS
              SOFTWARE: PatentIn Release #1.0, Version #1.30
         CURRENT APPLICATION DATA:
              APPLICATION NUMBER: US/08/801,405B
              FILING DATE: 20-Feb-1997
              CLASSIFICATION: <Unknown>
         ATTORNEY/AGENT INFORMATION:
              NAME: Dadio, Susan M.
              REGISTRATION NUMBER: 40,373
              REFERENCE/DOCKET NUMBER: 012880-003
         TELECOMMUNICATION INFORMATION:
              TELEPHONE: (703) 836-6620
              TELEFAX: (703) 836-2021
    INFORMATION FOR SEQ ID NO: 6:
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        MOLECULE TYPE: peptide
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; Publication No. US20020077314A1
; GENERAL INFORMATION:
  APPLICANT: Falk
   TITLE OF INVENTION: Use of Hyaluronic Acid and Forms to Prevent Arterial
   TITLE OF INVENTION: Restenosis
  FILE REFERENCE:
  CURRENT APPLICATION NUMBER: US/08/996,470A
  CURRENT FILING DATE: 1997-12-22
  EARLIER APPLICATION NUMBER: US 07/675,908
  EARLIER FILING DATE: 1991-07-03
  EARLIER APPLICATION NUMBER: US 07/838,674
  EARLIER FILING DATE: 1992-02-21
  EARLIER APPLICATION NUMBER: US 07/838,675
  EARLIER FILING DATE: 1992-02-21
  EARLIER APPLICATION NUMBER: US 08/125,398
  EARLIER FILING DATE: 1993-09-23
  EARLIER APPLICATION NUMBER: US 08/285,764
  EARLIER FILING DATE: 1994-08-03
   EARLIER APPLICATION NUMBER: US 07/952,095
   EARLIER FILING DATE: 1992-09-28
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    OTHER INFORMATION: binding region of RHAMM
US-08-996-470-2
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; Sequence 3, Application US/09729402
 Patent No. US20010021379A1
    GENERAL INFORMATION:
         APPLICANT: Cousens, Lawrence S.
                    Eberhardt, Christine D.
                    Gray, Patrick W.
                    Le Trong, Hai
                    Tjoelker, Larry W.
                    Wilder, Cheryl L.
         TITLE OF INVENTION: Platelet-Activating Factor
                             Acetylhydrolase
         NUMBER OF SEQUENCES: 30
         CORRESPONDENCE ADDRESS:
              ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
              STREET: 6300 Sears Tower, 233 South Wacker Drive
              CITY: Chicago
              STATE: Illinois
              COUNTRY: United States of America
              ZIP: 60606-6402
         COMPUTER READABLE FORM:
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              OPERATING SYSTEM: PC-DOS/MS-DOS
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              FILING DATE: 04-Dec-2000
              CLASSIFICATION: <Unknown>
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              FILING DATE: 06-OCT-1994
              APPLICATION NUMBER: US 08/133,803
              FILING DATE: 06-OCT-1993
         ATTORNEY/AGENT INFORMATION:
              NAME: No. US20010021379Aland, Greta E.
              REGISTRATION NUMBER: 35,302
              REFERENCE/DOCKET NUMBER: 27866/32793
         TELECOMMUNICATION INFORMATION:
              TELEPHONE: (312) 474-6300
              TELEFAX: (312) 474-0448
              TELEX: 25-3658
    INFORMATION FOR SEQ ID NO: 3:
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; Patent No. US20010042254A1
; GENERAL INFORMATION:
  APPLICANT: Stewart, Mary
  APPLICANT: Kozma, Sarah
  APPLICANT: Thomas, George
  TITLE OF INVENTION: Drosophila Melanogaster P70 S6 Kinase
 FILE REFERENCE: 4-20971/A
  CURRENT APPLICATION NUMBER: US/09/817,310
  CURRENT FILING DATE: 2001-03-26
  PRIOR APPLICATION NUMBER: 09/230,247
  PRIOR FILING DATE: 1999-04-16
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; Patent No. US20020058611A1
; GENERAL INFORMATION:
  APPLICANT: Stein, Stanley
  TITLE OF INVENTION: CARRIER FOR IN VIVO DELIVERY OF A THERAPEUTIC
  FILE REFERENCE: 601-1-083
  CURRENT APPLICATION NUMBER: US/09/802,109
; CURRENT FILING DATE: 2001-03-08
; PRIOR APPLICATION NUMBER: 09/044,411
; PRIOR FILING DATE: 1998-03-19
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    LOCATION: (10)
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RESULT 7
US-09-884-681-35
; Sequence 35, Application US/09884681
; Patent No. US20020061546A1
    GENERAL INFORMATION:
         APPLICANT: Tsien, Roger Y.
                    Cubitt, Andrew B.
         TITLE OF INVENTION: Assays for Protein Kinases Using
                             Fluorescent Protein Substrates
         NUMBER OF SEQUENCES: 48
         CORRESPONDENCE ADDRESS:
              ADDRESSEE: Townsend and Townsend and Crew LLP
              STREET: Two Embarcadero Center, Eighth Floor
              CITY: San Francisco
              STATE: California
              COUNTRY: USA
              ZIP: 94111-3834
         COMPUTER READABLE FORM:
              MEDIUM TYPE: Floppy disk
              COMPUTER: IBM PC compatible
              OPERATING SYSTEM: PC-DOS/MS-DOS
              SOFTWARE: PatentIn Release #1.0, Version #1.30
         CURRENT APPLICATION DATA:
              APPLICATION NUMBER: US/09/884,681
              FILING DATE: 19-Jun-2001
              CLASSIFICATION: <Unknown>
         PRIOR APPLICATION DATA:
              APPLICATION NUMBER: 08/679,865
              FILING DATE: <Unknown>
         ATTORNEY/AGENT INFORMATION:
              NAME: Storella, John S.
              REGISTRATION NUMBER: 32,944
              REFERENCE/DOCKET NUMBER: 02307Z-069000
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TELECOMMUNICATION INFORMATION:
              TELEPHONE: (415) 576-0200
              TELEFAX: (415) 576-0300
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    INFORMATION FOR SEQ ID NO: 35:
         SEQUENCE CHARACTERISTICS:
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              TYPE: amino acid
              STRANDEDNESS: <Unknown>
              TOPOLOGY: linear
         MOLECULE TYPE: peptide
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; Patent No. US20020098236A1
; GENERAL INFORMATION:
; APPLICANT: Fischer, Peter Martin
; APPLICANT: Zhelev, Nikolai
  TITLE OF INVENTION: Transport Vectors
  FILE REFERENCE: CCI-010
   CURRENT APPLICATION NUMBER: US/09/854,204
   CURRENT FILING DATE: 2001-05-11
   PRIOR APPLICATION NUMBER: 09/438,460
   PRIOR FILING DATE: 1999-11-12
   PRIOR APPLICATION NUMBER: GB 9825000.4
  PRIOR FILING DATE: 1998-11-13
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   PRIOR FILING DATE: 1999-11-11
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    LOCATION: (1)
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   LOCATION: (11)
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            1 ARQ 3
Db
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; Sequence 19, Application US/09839743
; Patent No. US20020146824A1
; GENERAL INFORMATION:
  APPLICANT: The Salk Institute for Biological Sciences
   APPLICANT: Lamb, Christopher
   APPLICANT: Doerner, Peter
   APPLICANT: Laible, Goetz
   TITLE OF INVENTION: No. US20020146824Alel Transcription Enhancer Element and
   TITLE OF INVENTION: Transcription Factor and Methods of Use Thereof
   FILE REFERENCE: SALKINS.008DV3
  CURRENT APPLICATION NUMBER: US/09/839,743
  CURRENT FILING DATE: 2001-04-19
  PRIOR APPLICATION NUMBER: US 09/401,336
  PRIOR FILING DATE: 1999-09-21
   PRIOR APPLICATION NUMBER: US 09/189,344
  PRIOR FILING DATE: 1998-11-10
  PRIOR APPLICATION NUMBER: US 08/669,721
  PRIOR FILING DATE: 1996-06-27
   NUMBER OF SEQ ID NOS: 28
   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 19
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Nicotiana tabacum
US-09-839-743-19
                          27.3%; Score 3; DB 9; Length 11;
  Query Match
                          100.0%; Pred. No. 7.8e+03;
  Best Local Similarity
                                                                               0;
                                 0; Mismatches
                                                    0; Indels
                                                                  0;
                                                                      Gaps
  Matches
             3; Conservative
            7 KPR 9
Qv
              111
Db
            4 KPR 6
RESULT 10
US-09-949-196-17
; Sequence 17, Application US/09949196
; Patent No. US20020147145A1
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: GENERAL INFORMATION:
 APPLICANT: Zealand Pharmaceuticals A/S
 TITLE OF INVENTION: MATERIALS AND METHODS RELATING TO THE DEGRADATION OF
Cdc25A IN RESPONSE
 TITLE OF INVENTION: TO DNA DAMAGE
 FILE REFERENCE: 55888 (45487)
  CURRENT APPLICATION NUMBER: US/09/949,196
  CURRENT FILING DATE: 2001-07-09
  NUMBER OF SEQ ID NOS: 45
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 17
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Description of Artificial Sequence: synthetic peptide
sequence
US-09-949-196-17
                         27.3%; Score 3; DB 9; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
           3; Conservative
                              0; Mismatches
                                                0; Indels
                                                                 0; Gaps
                                                                             0;
           1 ARQ 3
Qу
              \mathbf{I}
            6 ARO 8
Db
RESULT 11
US-09-955-504-29
; Sequence 29, Application US/09955504
; Publication No. US20020182702A1
; GENERAL INFORMATION:
  APPLICANT: Ruben et al.
  TITLE OF INVENTION: ADAM Polynucleotides, Polypeptides, and Antibodies
  FILE REFERENCE: PT006P2
  CURRENT APPLICATION NUMBER: US/09/955,504
  CURRENT FILING DATE: 2001-09-19
  PRIOR APPLICATION NUMBER: 60/234,222
  PRIOR FILING DATE: 2000-09-21
  PRIOR APPLICATION NUMBER: 09/712,907
  PRIOR FILING DATE: 2000-11-16
  PRIOR APPLICATION NUMBER: PCT/US00/14308
  PRIOR FILING DATE: 2000-05-25
  PRIOR APPLICATION NUMBER: 60/178,717
  PRIOR FILING DATE: 2000-01-28
  PRIOR APPLICATION NUMBER: 60/142,930
  PRIOR FILING DATE: 1999-07-09
  PRIOR APPLICATION NUMBER: 60/136,388
  PRIOR FILING DATE: 1999-05-27
 NUMBER OF SEQ ID NOS: 38
  SOFTWARE: PatentIn Ver. 2.0
; SEO ID NO 29
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Homo sapiens
US-09-955-504-29
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27.3%; Score 3; DB 9; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
          3; Conservative 0; Mismatches 0; Indels
                                                               0; Gaps
                                                                             0;
  Matches
           8 PRR 10
Qу
              111
           3 PRR 5
Db
RESULT 12
US-09-851-138-107
; Sequence 107, Application US/09851138
; Publication No. US20020183508A1
    GENERAL INFORMATION:
        APPLICANT: MAERTENS, GEERT
                    STUYVER, LIEVEN
        TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
                             AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND
DIAGNOSTIC
;
        NUMBER OF SEQUENCES: 207
;
         CORRESPONDENCE ADDRESS:
              ADDRESSEE: ARNOLD, WHITE & DURKEE
              STREET: P.O. BOX 4433
              CITY: HOUSTON
              STATE: TEXAS
              COUNTRY: USA
              ZIP: 77210-4433
         COMPUTER READABLE FORM:
             MEDIUM TYPE: Floppy disk
              COMPUTER: IBM PC compatible
              OPERATING SYSTEM: PC-DOS/MS-DOS
              SOFTWARE: Microsoft Word 6.0 / ASCII text output
         CURRENT APPLICATION DATA:
              APPLICATION NUMBER: US/09/851,138
              FILING DATE: 09-May-2001
         PRIOR APPLICATION DATA:
              APPLICATION NUMBER: 08/836,075
              FILING DATE: <Unknown>
              APPLICATION NUMBER: EP 94870166.9
              FILING DATE: 21 Oct 1994
              APPLICATION NUMBER: EP 95870076.7
              FILING DATE: 28 Jun 1995
         ATTORNEY/AGENT INFORMATION:
              NAME: KAMMERER, PATRICIA A.
              REGISTRATION NUMBER: 29,775
              REFERENCE/DOCKET NUMBER: INNS:004
    INFORMATION FOR SEQ ID NO: 107:
         SEQUENCE CHARACTERISTICS:
              LENGTH: 11 amino acids
;
              TYPE: amino acid
              TOPOLOGY: linear
         MOLECULE TYPE: peptide
         SEQUENCE DESCRIPTION: SEQ ID NO: 107:
US-09-851-138-107
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Query Match
                         27.3%; Score 3; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
          3; Conservative
                               0; Mismatches 0; Indels
                                                              0; Gaps
                                                                            0;
            1 ARQ 3
QУ
             -1.11
           1 ARQ 3
RESULT 13
US-09-851-138-108
; Sequence 108, Application US/09851138
; Publication No. US20020183508A1
    GENERAL INFORMATION:
        APPLICANT: MAERTENS, GEERT
                    STUYVER, LIEVEN
         TITLE OF INVENTION: NEW SEQUENCES OF HEPATITIS C VIRUS GENOTYPES
                            AND THEIR USE AS PROPHYLACTIC, THERAPEUTIC AND
DIAGNOSTIC
                            AGENTS
        NUMBER OF SEQUENCES: 207
         CORRESPONDENCE ADDRESS:
             ADDRESSEE: ARNOLD, WHITE & DURKEE
              STREET: P.O. BOX 4433
              CITY: HOUSTON
              STATE: TEXAS
              COUNTRY: USA
             ZIP: 77210-4433
         COMPUTER READABLE FORM:
             MEDIUM TYPE: Floppy disk
              COMPUTER: IBM PC compatible
             OPERATING SYSTEM: PC-DOS/MS-DOS
              SOFTWARE: Microsoft Word 6.0 / ASCII text output
         CURRENT APPLICATION DATA:
              APPLICATION NUMBER: US/09/851,138
              FILING DATE: 09-May-2001
         PRIOR APPLICATION DATA:
             APPLICATION NUMBER: 08/836,075
              FILING DATE: <Unknown>
             APPLICATION NUMBER: EP 94870166.9
              FILING DATE: 21 Oct 1994
              APPLICATION NUMBER: EP 95870076.7
              FILING DATE: 28 Jun 1995
        ATTORNEY/AGENT INFORMATION:
             NAME: KAMMERER, PATRICIA A.
              REGISTRATION NUMBER: 29,775
              REFERENCE/DOCKET NUMBER: INNS:004
    INFORMATION FOR SEQ ID NO: 108:
         SEQUENCE CHARACTERISTICS:
              LENGTH: 11 amino acids
              TYPE: amino acid
              TOPOLOGY: linear
        MOLECULE TYPE: peptide
         SEQUENCE DESCRIPTION: SEQ ID NO: 108:
US-09-851-138-108
                         27.3%; Score 3; DB 9; Length 11;
  Query Match
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Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
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           9 RRS 11
Qу
             -111
           2 RRS 4
Db
RESULT 14
US-09-367-703-7
; Sequence 7, Application US/09367703
; Publication No. US20020198361A1
; GENERAL INFORMATION:
; APPLICANT: ROUGEOT, Catherine
 APPLICANT: ROUGEON, Francois
  TITLE OF INVENTION: THERAPEUTIC USE OF THE SMR 1 PROTEIN AND ACTIVE
  TITLE OF INVENTION: DERIVATIVES THEREOF
  FILE REFERENCE: 0660-0158-0PCT
  CURRENT APPLICATION NUMBER: US/09/367,703
  CURRENT FILING DATE: 1999-10-13
; PRIOR APPLICATION NUMBER: PCT/EP98/00956
 PRIOR FILING DATE: 1998-02-19
; NUMBER OF SEQ ID NOS: 13
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 7
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Rattus rattus
US-09-367-703-7
 Query Match
                         27.3%; Score 3; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                             0; Mismatches 0; Indels
 Matches 3; Conservative
                                                               0; Gaps
                                                                           0;
           8 PRR 10
Qy
             \mathbf{I}
Db
           4 PRR 6
RESULT 15
US-09-983-802-423
; Sequence 423, Application US/09983802
; Publication No. US20030022185A1
; GENERAL INFORMATION:
; APPLICANT: Fischer et al.
; TITLE OF INVENTION: 123 Human Secreted Proteins
; FILE REFERENCE: PZ010P1
  CURRENT APPLICATION NUMBER: US/09/983,802
  CURRENT FILING DATE: 2001-10-25
  PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 09/227,357
  PRIOR FILING DATE: EARLIER FILING DATE: 1999-01-08
  PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PCT/US98/13684
  PRIOR FILING DATE: EARLIER FILING DATE: 1998-07-07
  PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,926
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/052,793
: PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
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PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,925
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,929
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/052,803
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/052,732
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,931
PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,932
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,916
PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,930
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,918
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,920
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/052,733
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/052,795
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,919
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/051,928
PRIOR FILING DATE: EARLIER FILING DATE: 1997-07-08
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,722
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,723
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,948
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,949
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,953
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,950
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,947
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,964
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/056,360
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,684
PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,984
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/055,954
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-08-18
 PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/058,785
 PRIOR FILING DATE: EARLIER FILING DATE: 1997-09-12
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/058,664
PRIOR FILING DATE: EARLIER FILING DATE: 1997-09-12
PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/058,660
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PRIOR FILING DATE: EARLIER FILING DATE: 1997-09-12
  PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/058,661
  PRIOR FILING DATE: EARLIER FILING DATE: 1997-09-12
 NUMBER OF SEQ ID NOS: 672
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 423
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-983-802-423
                         27.3%; Score 3; DB 10; Length 11;
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 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                                                0; Indels 0; Gaps
                              0; Mismatches
          3; Conservative
 Matches
           3 QKT 5
Qу
             5 QKT 7
Db
RESULT 16
US-09-974-879-330
; Sequence 330, Application US/09974879
; Publication No. US20030028003A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
  TITLE OF INVENTION: 125 Human Secreted Proteins
  FILE REFERENCE: PZ020P2
  CURRENT APPLICATION NUMBER: US/09/974,879
  CURRENT FILING DATE: 2001-10-12
  PRIOR APPLICATION NUMBER: US 60/239,893
  PRIOR FILING DATE: 2000-10-13
  PRIOR APPLICATION NUMBER: US 09/818,683
  PRIOR FILING DATE: 2001-03-28
  PRIOR APPLICATION NUMBER: US 09/305,736
  PRIOR FILING DATE: 1999-05-05
  PRIOR APPLICATION NUMBER: PCT/US98/23435
  PRIOR FILING DATE: 1998-11-04
  PRIOR APPLICATION NUMBER: US 60/064,911
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,912
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,983
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,900
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,988
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,987
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,908
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,984
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,985
  PRIOR FILING DATE: 1997-11-07
; PRIOR APPLICATION NUMBER: US 60/066,094
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PRIOR FILING DATE: 1997-11-17
  PRIOR APPLICATION NUMBER: US 60/066,100
  PRIOR FILING DATE: 1997-11-17
  PRIOR APPLICATION NUMBER: US 60/066,089
  PRIOR FILING DATE: 1997-11-17
  PRIOR APPLICATION NUMBER: US 60/066,095
  PRIOR FILING DATE: 1997-11-17
  PRIOR APPLICATION NUMBER: US 60/066,090
  PRIOR FILING DATE: 1997-11-17
 NUMBER OF SEQ ID NOS: 611
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 330
   LENGTH: 11
    TYPE: PRT
   ORGANISM: Homo sapiens
US-09-974-879-330
                         27.3%; Score 3; DB 10; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                             0; Mismatches 0; Indels 0; Gaps
                                                                           0;
          3; Conservative
           9 RRS 11
Qу
             | | | |
           2 RRS 4
Db
RESULT 17
US-09-988-792-6
; Sequence 6, Application US/09988792
; Publication No. US20030032599A1
; GENERAL INFORMATION:
  APPLICANT: Lipkowski, Andrezej W
  APPLICANT: Carr, Daniel B
  TITLE OF INVENTION: NOVEL ANTIMICROBIAL COMPOUNDS
  FILE REFERENCE: 18475-025
  CURRENT APPLICATION NUMBER: US/09/988,792
  CURRENT FILING DATE: 2001-11-20
  PRIOR APPLICATION NUMBER: 60/252,369
  PRIOR FILING DATE: 2000-11-21
; NUMBER OF SEQ ID NOS: 14
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Scyliorhinus canicula
US-09-988-792-6
                         27.3%; Score 3; DB 10; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                                                                            0;
  Matches 3; Conservative 0; Mismatches
                                               0; Indels
                                                                0; Gaps
           7 KPR 9
Qу
             \perp
           1 KPR 3
```

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US-09-988-792-9
; Sequence 9, Application US/09988792
; Publication No. US20030032599A1
; GENERAL INFORMATION:
; APPLICANT: Lipkowski, Andrezej W
 APPLICANT: Carr, Daniel B
  TITLE OF INVENTION: NOVEL ANTIMICROBIAL COMPOUNDS
  FILE REFERENCE: 18475-025
  CURRENT APPLICATION NUMBER: US/09/988,792
  CURRENT FILING DATE: 2001-11-20
  PRIOR APPLICATION NUMBER: 60/252,369
  PRIOR FILING DATE: 2000-11-21
 NUMBER OF SEQ ID NOS: 14
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Gadus morhua
US-09-988-792-9
                         27.3%; Score 3; DB 10; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches
           3; Conservative 0; Mismatches
                                               0; Indels, 0; Gaps
           7 KPR 9
Qу
             +11
Db
           1 KPR 3
RESULT 19
US-09-988-792-10
; Sequence 10, Application US/09988792
; Publication No. US20030032599A1
; GENERAL INFORMATION:
; APPLICANT: Lipkowski, Andrezej W
 APPLICANT: Carr, Daniel B
  TITLE OF INVENTION: NOVEL ANTIMICROBIAL COMPOUNDS
  FILE REFERENCE: 18475-025
  CURRENT APPLICATION NUMBER: US/09/988,792
  CURRENT FILING DATE: 2001-11-20
  PRIOR APPLICATION NUMBER: 60/252,369
  PRIOR FILING DATE: 2000-11-21
  NUMBER OF SEQ ID NOS: 14
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 10
  LENGTH: 11
   TYPE: PRT
   ORGANISM: Oncorhynchus mykiss
US-09-988-792-10
                         27.3%; Score 3; DB 10; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
          3; Conservative 0; Mismatches 0; Indels 0; Gaps
 Matches
           7 KPR 9
Qу
             \mathbf{I}
Db
           1 KPR 3
```

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RESULT 20
US-09-882-291-45
; Sequence 45, Application US/09882291
; Publication No. US20030040472A1
; GENERAL INFORMATION:
  APPLICANT: Zealand Pharmaceuticals A/S
  TITLE OF INVENTION: No. US20030040472Alel Peptide Conjugates
  FILE REFERENCE: 007-2001
  CURRENT APPLICATION NUMBER: US/09/882,291
  CURRENT FILING DATE: 2001-06-15
  NUMBER OF SEQ ID NOS: 77
  SOFTWARE: PatentIn version 3.1
 SEQ ID NO 45
   LENGTH: 11
    TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Description of Artificial Sequence: synthetic peptide
US-09-882-291-45
                         27.3%; Score 3; DB 10; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
           3; Conservative 0; Mismatches 0;
                                                      Indels
                                                                0; Gaps
                                                                            0;
           1 ARQ 3
Qy
              111
            6 ARQ 8
RESULT 21
US-09-775-052-4
; Sequence 4, Application US/09775052
; Publication No. US20030054000A1
; GENERAL INFORMATION:
  APPLICANT: Dowdy, Steven F.
  TITLE OF INVENTION: ANTI-PATHOGEN SYSTEM AND METHODS OF USE THEREOF
  FILE REFERENCE: 48881/1742
  CURRENT APPLICATION NUMBER: US/09/775,052
  CURRENT FILING DATE: 2001-02-01
  PRIOR APPLICATION NUMBER: 09/208,966
  PRIOR FILING DATE: 1998-12-10
  PRIOR APPLICATION NUMBER: 60/082,402
  PRIOR FILING DATE: 1998-04-20
  PRIOR APPLICATION NUMBER: 60/069,012
  PRIOR FILING DATE: 1997-12-10
  NUMBER OF SEQ ID NOS: 57
  SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 4
   LENGTH: 11
   TYPE: PRT
   ORGANISM: human
US-09-775-052-4
                         27.3%; Score 3; DB 10; Length 11;
  Query Match
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```
Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                                                            0; Gaps
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                                           0;
           1 ARO 3
Qу
             Db
           6 ARQ 8
RESULT 22
US-09-775-052-40
; Sequence 40, Application US/09775052
; Publication No. US20030054000A1
; GENERAL INFORMATION:
; APPLICANT: Dowdy, Steven F.
  TITLE OF INVENTION: ANTI-PATHOGEN SYSTEM AND METHODS OF USE THEREOF
; FILE REFERENCE: 48881/1742
  CURRENT APPLICATION NUMBER: US/09/775,052
  CURRENT FILING DATE: 2001-02-01
; PRIOR APPLICATION NUMBER: 09/208,966
; PRIOR FILING DATE: 1998-12-10
  PRIOR APPLICATION NUMBER: 60/082,402
  PRIOR FILING DATE: 1998-04-20
  PRIOR APPLICATION NUMBER: 60/069,012
  PRIOR FILING DATE: 1997-12-10
; NUMBER OF SEQ ID NOS: 57
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 40
   LENGTH: 11
   TYPE: PRT
   ORGANISM: human
US-09-775-052-40
  Query Match
                         27.3%; Score 3; DB 10; Length 11;
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                               0; Gaps
                                                                           0;
           1 ARQ 3
Qу
             -111
Db
           6 ARQ 8
RESULT 23
US-09-775-052-55
; Sequence 55, Application US/09775052
; Publication No. US20030054000A1
; GENERAL INFORMATION:
; APPLICANT: Dowdy, Steven F.
  TITLE OF INVENTION: ANTI-PATHOGEN SYSTEM AND METHODS OF USE THEREOF
; FILE REFERENCE: 48881/1742
  CURRENT APPLICATION NUMBER: US/09/775,052
  CURRENT FILING DATE: 2001-02-01
  PRIOR APPLICATION NUMBER: 09/208,966
; PRIOR FILING DATE: 1998-12-10
; PRIOR APPLICATION NUMBER: 60/082,402
; PRIOR FILING DATE: 1998-04-20
; PRIOR APPLICATION NUMBER: 60/069,012
; PRIOR FILING DATE: 1997-12-10
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NUMBER OF SEQ ID NOS: 57
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 55
   LENGTH: 11
   TYPE: PRT
   ORGANISM: human
US-09-775-052-55
                         27.3%; Score 3; DB 10; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative 0; Mismatches
                                                  0;
                                                                            0;
 Matches
                                                     Indels
                                                                0; Gaps
            8 PRR 10
Qу
             \perp
           8 PRR 10
Dh
RESULT 24
US-09-775-052-56
; Sequence 56, Application US/09775052
; Publication No. US20030054000A1
; GENERAL INFORMATION:
  APPLICANT: Dowdy, Steven F.
  TITLE OF INVENTION: ANTI-PATHOGEN SYSTEM AND METHODS OF USE THEREOF
  FILE REFERENCE: 48881/1742
  CURRENT APPLICATION NUMBER: US/09/775,052
  CURRENT FILING DATE: 2001-02-01
  PRIOR APPLICATION NUMBER: 09/208,966
  PRIOR FILING DATE: 1998-12-10
  PRIOR APPLICATION NUMBER: 60/082,402
  PRIOR FILING DATE: 1998-04-20
  PRIOR APPLICATION NUMBER: 60/069,012
  PRIOR FILING DATE: 1997-12-10
  NUMBER OF SEQ ID NOS: 57
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 56
   LENGTH: 11
   TYPE: PRT
   ORGANISM: human
US-09-775-052-56
                         27.3%; Score 3; DB 10; Length 11;
  Query Match
                         100.0%; Pred. No. 7.8e+03;
  Best Local Similarity
                              0; Mismatches
 Matches
            3; Conservative
                                                 0; Indels 0; Gaps
                                                                            0;
            8 PRR 10
Qу
             -111
            5 PRR 7
RESULT 25
US-09-775-052-57
; Sequence 57, Application US/09775052
; Publication No. US20030054000A1
; GENERAL INFORMATION:
 APPLICANT: Dowdy, Steven F.
; TITLE OF INVENTION: ANTI-PATHOGEN SYSTEM AND METHODS OF USE THEREOF
```

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CURRENT APPLICATION NUMBER: US/09/775,052
  CURRENT FILING DATE: 2001-02-01
  PRIOR APPLICATION NUMBER: 09/208,966
  PRIOR FILING DATE: 1998-12-10
  PRIOR APPLICATION NUMBER: 60/082,402
  PRIOR FILING DATE: 1998-04-20
  PRIOR APPLICATION NUMBER: 60/069,012
  PRIOR FILING DATE: 1997-12-10
; NUMBER OF SEQ ID NOS: 57
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 57
   LENGTH: 11
   TYPE: PRT
   ORGANISM: human,
US-09-775-052-57
 Query Match
                        27.3%; Score 3; DB 10; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                                                                           0;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                             0; Gaps
           8 PRR 10
Qy
             \perp
           5 PRR 7
RESULT 26
US-09-876-904A-100
; Sequence 100, Application US/09876904A
; Publication No. US20030072794A1
; GENERAL INFORMATION:
 APPLICANT: BOULIKAS, TENI
  TITLE OF INVENTION: ENCAPSULATION OF PLASMID DNA (LIPOGENES TM) AND
THERAPEUTIC
; TITLE OF INVENTION: AGENTS WITH NUCLEAR LOCALIZATION SIGNAL/FUSOGENIC
PEPTIDE
  TITLE OF INVENTION: CONJUGATES INTO TARGETED LIPOSOME COMPLEXES
  FILE REFERENCE: TB-2002.00
  CURRENT APPLICATION NUMBER: US/09/876,904A
  CURRENT FILING DATE: 2001-06-08
  PRIOR APPLICATION NUMBER: US 60/210,925
  PRIOR FILING DATE: 2000-06-09
; NUMBER OF SEQ ID NOS: 629
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 100
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
"Tripartite" or
   OTHER INFORMATION: "doubly bipartite" NLS of adenovirus DNA polymerase
US-09-876-904A-100
                         27.3%; Score 3; DB 10; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0;
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FILE REFERENCE: 48881/1742

```
8 PRR 10
Qу
              \mathbf{I}
            2 PRR 4
Db
RESULT 27
US-09-876-904A-157
; Sequence 157, Application US/09876904A
; Publication No. US20030072794A1
; GENERAL INFORMATION:
; APPLICANT: BOULIKAS, TENI
  TITLE OF INVENTION: ENCAPSULATION OF PLASMID DNA (LIPOGENES TM) AND
THERAPEUTIC
  TITLE OF INVENTION: AGENTS WITH NUCLEAR LOCALIZATION SIGNAL/FUSOGENIC
PEPTIDE
  TITLE OF INVENTION: CONJUGATES INTO TARGETED LIPOSOME COMPLEXES
  FILE REFERENCE: TB-2002.00
  CURRENT APPLICATION NUMBER: US/09/876,904A
  CURRENT FILING DATE: 2001-06-08
  PRIOR APPLICATION NUMBER: US 60/210,925
  PRIOR FILING DATE: 2000-06-09
 NUMBER OF SEQ ID NOS: 629
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 157
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Saccharomyces cerevisiae
    OTHER INFORMATION: Karyophilic peptide
US-09-876-904A-157
  Query Match
                         27.3%; Score 3; DB 10; Length 11;
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative
                               0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
            9 RRS 11
QУ
              | | |
            7 RRS 9
RESULT 28
US-09-876-904A-364
; Sequence 364, Application US/09876904A
; Publication No. US20030072794A1
; GENERAL INFORMATION:
 APPLICANT: BOULIKAS, TENI
 TITLE OF INVENTION: ENCAPSULATION OF PLASMID DNA (LIPOGENES TM) AND
THERAPEUTIC
; TITLE OF INVENTION: AGENTS WITH NUCLEAR LOCALIZATION SIGNAL/FUSOGENIC
; TITLE OF INVENTION: CONJUGATES INTO TARGETED LIPOSOME COMPLEXES
  FILE REFERENCE: TB-2002.00
 CURRENT APPLICATION NUMBER: US/09/876,904A
; CURRENT FILING DATE: 2001-06-08
; PRIOR APPLICATION NUMBER: US 60/210,925
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; PRIOR FILING DATE: 2000-06-09

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; NUMBER OF SEQ ID NOS: 629
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 364
  LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
   FEATURE:
   OTHER INFORMATION: Human TCF-1
US-09-876-904A-364
                        27.3%; Score 3; DB 10; Length 11;
 Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
          3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0;
           9 RRS 11
Qу
             5 RRS 7
Db
RESULT 29
US-09-876-904A-481
; Sequence 481, Application US/09876904A
; Publication No. US20030072794A1
; GENERAL INFORMATION:
; APPLICANT: BOULIKAS, TENI
; TITLE OF INVENTION: ENCAPSULATION OF PLASMID DNA (LIPOGENES TM) AND
THERAPEUTIC
; TITLE OF INVENTION: AGENTS WITH NUCLEAR LOCALIZATION SIGNAL/FUSOGENIC
PEPTIDE
  TITLE OF INVENTION: CONJUGATES INTO TARGETED LIPOSOME COMPLEXES
; FILE REFERENCE: TB-2002.00
  CURRENT APPLICATION NUMBER: US/09/876,904A
  CURRENT FILING DATE: 2001-06-08
  PRIOR APPLICATION NUMBER: US 60/210,925
  PRIOR FILING DATE: 2000-06-09
; NUMBER OF SEQ ID NOS: 629
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 481
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Mus sp.
;
   FEATURE:
   OTHER INFORMATION: Mouse LFB3.
;
   FEATURE:
;
   NAME/KEY: MOD RES
   LOCATION: (5)..(8)
   OTHER INFORMATION: Any Amino acid
US-09-876-904A-481
                         27.3%; Score 3; DB 10; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
  Matches 3; Conservative
                             0; Mismatches 0; Indels 0; Gaps
           2 RQK 4
Qy
             111
Db
          9 RQK 11
```

```
RESULT 30
US-09-876-904A-610
; Sequence 610, Application US/09876904A
; Publication No. US20030072794A1
; GENERAL INFORMATION:
; APPLICANT: BOULIKAS, TENI
  TITLE OF INVENTION: ENCAPSULATION OF PLASMID DNA (LIPOGENES TM) AND
THERAPEUTIC
; TITLE OF INVENTION: AGENTS WITH NUCLEAR LOCALIZATION SIGNAL/FUSOGENIC
PEPTIDE
  TITLE OF INVENTION: CONJUGATES INTO TARGETED LIPOSOME COMPLEXES
  FILE REFERENCE: TB-2002.00
  CURRENT APPLICATION NUMBER: US/09/876,904A
  CURRENT FILING DATE: 2001-06-08
  PRIOR APPLICATION NUMBER: US 60/210,925
  PRIOR FILING DATE: 2000-06-09
  NUMBER OF SEQ ID NOS: 629
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 610
   LENGTH: 11
    TYPE: PRT
   ORGANISM: Bos sp.
    FEATURE:
   OTHER INFORMATION: Calf Thymus HMG17 (89aa; 9,248 D).
US-09-876-904A-610
 Query Match
                         27.3%; Score 3; DB 10; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative
                               0; Mismatches
                                                   0; Indels
                                                                 0;
                                                                     Gaps
                                                                             0;
            9 RRS 11
Qу
              111
            5 RRS 7
Db
RESULT 31
US-09-922-226-78
; Sequence 78, Application US/09922226
; Publication No. US20030077664A1
; GENERAL INFORMATION:
  APPLICANT: Zhao, Yi
              Thacher, Scott M.
  APPLICANT:
  APPLICANT: Xiao, Jia-Hao
  APPLICANT: Kusari, Jyotirmoy
  APPLICANT: Chandraratna, Roshantha A.
  TITLE OF INVENTION: Methods of Screening For Compounds That
  TITLE OF INVENTION: Modulate Hormone Receptor Activity
  FILE REFERENCE: P-AR 4681
  CURRENT APPLICATION NUMBER: US/09/922,226
  CURRENT FILING DATE: 2002-01-09
  PRIOR APPLICATION NUMBER: US 60/284,797
; PRIOR FILING DATE: 2001-04-18
; NUMBER OF SEQ ID NOS: 191
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 78
   LENGTH: 11
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TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: synthetic peptide
US-09-922-226-78
 Query Match
                         27.3%; Score 3; DB 10; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels
                                                               0; Gaps
                                                                           0;
       . 9 RRS 11
Qу
             \Box\Box
Db
           4 RRS 6
RESULT 32
US-09-892-877-299
; Sequence 299, Application US/09892877
; Publication No. US20030077809A1
; GENERAL INFORMATION:
  APPLICANT: Ruben et. al.
  TITLE OF INVENTION: 97 Human secreted proteins
  FILE REFERENCE: PZ028P1
  CURRENT APPLICATION NUMBER: US/09/892,877
  CURRENT FILING DATE: 2001-06-28
  PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: US/09/437,658
; PRIOR FILING DATE: EARLIER FILING DATE: 1999-11-10
; NUMBER OF SEQ ID NOS: 461
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 299
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-892-877-299
                         27.3%; Score 3; DB 10; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
          3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                           0:
 Matches
           9 RRS 11
Qу
             \perp
Db
           1 RRS 3
RESULT 33
US-09-305-736-330
; Sequence 330, Application US/09305736
; Publication No. US20030088078A1
; GENERAL INFORMATION:
  APPLICANT: Feng et al.
  TITLE OF INVENTION: 125 Human Secreted Proteins
  FILE REFERENCE: PZ020P1
 CURRENT APPLICATION NUMBER: US/09/305,736
; CURRENT FILING DATE: 1999-05-05
; EARLIER APPLICATION NUMBER: PCT/US98/23435
; EARLIER FILING DATE: 1998-11-04
; EARLIER APPLICATION NUMBER: 60/064,911
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EARLIER FILING DATE: 1997-11-07
  EARLIER APPLICATION NUMBER: 60/064,912
  EARLIER FILING DATE: 1997-11-07
  EARLIER APPLICATION NUMBER: 60/064,983
  EARLIER FILING DATE: 1997-11-07
  EARLIER APPLICATION NUMBER: 60/064,900
  EARLIER FILING DATE: 1997-11-07
  EARLIER APPLICATION NUMBER: 60/064,988
  EARLIER FILING DATE: 1997-11-07
  EARLIER APPLICATION NUMBER: 60/064,987
  EARLIER FILING DATE: 1997-11-07
  EARLIER APPLICATION NUMBER: 60/064,908
  EARLIER FILING DATE: 1997-11-07
  EARLIER APPLICATION NUMBER: 60/064,984
  EARLIER FILING DATE: 1997-11-07
  EARLIER APPLICATION NUMBER: 60/064,985
  EARLIER FILING DATE: 1997-11-07
  EARLIER APPLICATION NUMBER: 60/066,094
  EARLIER FILING DATE: 1997-11-17
  EARLIER APPLICATION NUMBER: 60/066,100
  EARLIER FILING DATE: 1997-11-17
  EARLIER APPLICATION NUMBER: 60/066,089
  EARLIER FILING DATE: 1997-11-17
  EARLIER APPLICATION NUMBER: 60.066,095
  EARLIER FILING DATE: 1997-11-17
  EARLIER APPLICATION NUMBER: 60/066,090
  EARLIER FILING DATE: 1997-11-17
; NUMBER OF SEQ ID NOS: 612
  SOFTWARE: PatentIn Ver. 2.0
; SEO ID NO 330
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-305-736-330
 Query Match 27.3%; Score 3; DB 10; Length 11; Best Local Similarity 100.0%; Pred. No. 7.8e+03;
          3; Conservative 0; Mismatches 0; Indels 0; Gaps
 Matches
            9 RRS 11
Qу
              III
Db
            2 RRS 4
RESULT 34
US-09-992-665-6
; Sequence 6, Application US/09992665
; Publication No. US20030092009A1
; GENERAL INFORMATION:
  APPLICANT: Kaia Palm
  TITLE OF INVENTION: PROFILING TUMOR SPECIFIC MARKERS FOR THE
  TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF NEOPLASTIC DISEASE
  FILE REFERENCE: CEMINES.002A
; CURRENT APPLICATION NUMBER: US/09/992,665
; CURRENT FILING DATE: 2001-11-13
; PRIOR APPLICATION NUMBER: 60/249,508
; PRIOR FILING DATE: 2000-11-16
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NUMBER OF SEQ ID NOS: 380
  SOFTWARE: FastSEQ for Windows Version 4.0
 ; SEQ ID NO 6
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Probe
US-09-992-665-6
                          27.3%; Score 3; DB 10; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                              0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0;
  Matches
             3; Conservative
            6 MKP 8
              9 MKP 11
 Db
 RESULT 35
US-09-852-910-75
 ; Sequence 75, Application US/09852910
 ; Publication No. US20030096297A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Hamm, Heidi
 ; APPLICANT: Gilchrist, Annette
 ; TITLE OF INVENTION: Method For Identifying Inhibitors of G Protein Coupled
 Receptor Signaling
 ; FILE REFERENCE: 2661-101
   CURRENT APPLICATION NUMBER: US/09/852,910
   CURRENT FILING DATE: 2001-09-18
   PRIOR APPLICATION NUMBER: US 60/275,472
  PRIOR FILING DATE: 2001-03-14
 ; NUMBER OF SEQ ID NOS: 271
  SOFTWARE: PatentIn version 3.0
 ; SEQ ID NO 75
    LENGTH: 11
     TYPE: PRT
     ORGANISM: Oryza sativa
 US-09-852-910-75
                          27.3%; Score 3; DB 10; Length 11;
   Query Match
   Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                                                                0; Gaps
            3; Conservative 0; Mismatches 0; Indels
   Matches
             9 RRS 11
Qy
              \perp
             5 RRS 7
 Db
 RESULT 36
 US-09-852-910-228
 ; Sequence 228, Application US/09852910
 ; Publication No. US20030096297A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Hamm, Heidi
 ; APPLICANT: Gilchrist, Annette
```

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TITLE OF INVENTION: Method For Identifying Inhibitors of G Protein Coupled
Receptor Signaling
  FILE REFERENCE: 2661-101
  CURRENT APPLICATION NUMBER: US/09/852,910
  CURRENT FILING DATE: 2001-09-18
   PRIOR APPLICATION NUMBER: US 60/275,472
  PRIOR FILING DATE: 2001-03-14
  NUMBER OF SEQ ID NOS: 271
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 228
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
;
   NAME/KEY: misc feature
;
    LOCATION: (1)..(11)
    OTHER INFORMATION: G12 library peptide
US-09-852-910-228
                          27.3%; Score 3; DB 10; Length 11;
  Query Match
                          100.0%; Pred. No. 7.8e+03;
  Best Local Similarity
                                                       Indels
                                                                  0; Gaps
                                                                              0;
                                 0; Mismatches
                                                  0;
            3; Conservative
            5 TMK 7
Qу
              +111
            4 TMK 6
Db
RESULT 37
US-09-948-783-312
; Sequence 312, Application US/09948783
; Publication No. US20030100051A1
; GENERAL INFORMATION:
   APPLICANT: Ruben et. al.
   TITLE OF INVENTION: 97 Human secreted proteins
  FILE REFERENCE: PZ028P2
   CURRENT APPLICATION NUMBER: US/09/948,783
   CURRENT FILING DATE: 2001-09-10
   PRIOR APPLICATION NUMBER: 60/231,846
   PRIOR FILING DATE: 2000-09-11
   PRIOR APPLICATION NUMBER: 09/892,877
;
   PRIOR FILING DATE: 2001-06-28
   PRIOR APPLICATION NUMBER: 09/437,658
   PRIOR FILING DATE: 1999-11-10
   PRIOR APPLICATION NUMBER: PCT/US99/09847
   PRIOR FILING DATE: 1999-05-06
   PRIOR APPLICATION NUMBER: 60/085,093
   PRIOR FILING DATE: 1998-05-12
;
   PRIOR APPLICATION NUMBER: 60/085,094
;
   PRIOR FILING DATE: 1998-05-12
   PRIOR APPLICATION NUMBER: 60/085,105
   PRIOR FILING DATE: 1998-05-12
   PRIOR APPLICATION NUMBER: 60/085,180
   PRIOR FILING DATE: 1998-05-12
   PRIOR APPLICATION NUMBER: 60/085,927
   PRIOR FILING DATE: 1998-05-18
   PRIOR APPLICATION NUMBER: 60/085,906
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PRIOR FILING DATE: 1998-05-18
  PRIOR APPLICATION NUMBER: 60/085,924
  PRIOR FILING DATE: 1998-05-18
  PRIOR APPLICATION NUMBER: 60/085,922
  PRIOR FILING DATE: 1998-05-18
  PRIOR APPLICATION NUMBER: 60/085,921
  PRIOR FILING DATE: 1998-05-18
  PRIOR APPLICATION NUMBER: 60/085,923
  PRIOR FILING DATE: 1998-05-18
  PRIOR APPLICATION NUMBER: 60/085,925
  PRIOR FILING DATE: 1998-05-18
  PRIOR APPLICATION NUMBER: 60/085,928
  PRIOR FILING DATE: 1998-05-18
  PRIOR APPLICATION NUMBER: 60/085,920
  PRIOR FILING DATE: 1998-05-18
  NUMBER OF SEQ ID NOS: 465
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 312
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-09-948-783-312
                         27.3%; Score 3; DB 10; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                                                                             0;
            3; Conservative 0; Mismatches 0;
                                                     Indels
                                                                 0; Gaps
 Matches
            9 RRS 11
Qу
             111
Dh
            1 RRS 3
RESULT 38
US-09-978-309A-25
; Sequence 25, Application US/09978309A
; Publication No. US20030100490A1
; GENERAL INFORMATION:
  APPLICANT: Cruz, Tony
  APPLICANT: Pastrak, Aleksandra
  APPLICANT: Turley, Eva A.
  TITLE OF INVENTION: Compositions and Methods for Treating Cellular Response
to
  TITLE OF INVENTION: Injury and Other Proliferating Cell Disorders Regulated
;
by
  TITLE OF INVENTION: Hyaladherin and Hyaluronans
  FILE REFERENCE: 033352-010
  CURRENT APPLICATION NUMBER: US/09/978,309A
  CURRENT FILING DATE: 2002-04-04
   PRIOR APPLICATION NUMBER: US 09/685,010
  PRIOR FILING DATE: 2000-10-05
;
  PRIOR APPLICATION NUMBER: US 09/541,522
   PRIOR FILING DATE: 2000-04-03
  PRIOR APPLICATION NUMBER: US 60/127,457
  PRIOR FILING DATE: 1999-04-01
 NUMBER OF SEQ ID NOS: 84
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 25
```

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LENGTH: 11
;
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Scrambled hyalauron binding peptide
US-09-978-309A-25
                         27.3%; Score 3; DB 10; Length 11;
 Query Match
                         100.0%; Pred. No. 7.8e+03;
 Best Local Similarity
            3; Conservative
                              0; Mismatches
                                                 0; Indels
                                                             0; Gaps
 Matches
           2 RQK 4
QУ
             III
           1 RQK 3
Db
RESULT 39
US-09-940-316B-35
; Sequence 35, Application US/09940316B
; Publication No. US20030175901A1
; GENERAL INFORMATION:
 APPLICANT: KOSAN BIOSCIENCES, Inc.
  APPLICANT: REEVES, CHRISTOPHER
  APPLICANT: CHU, DANIEL
; APPLICANT: KHOSLA, CHAITAN
; APPLICANT: SANTI, DANIEL
; APPLICANT: WU, KAI
; TITLE OF INVENTION: POLYKETIDES ENCODING THE fkbA GENE OF THE FK-520
POLYKETIDE SYNTHASE
  TITLE OF INVENTION: GENE CLUSTER
  FILE REFERENCE: 30062-20026.11
  CURRENT APPLICATION NUMBER: US/09/940,316B
  CURRENT FILING DATE: 2001-08-27
  PRIOR APPLICATION NUMBER: 09/410,551
  PRIOR FILING DATE: 1999-10-01
  PRIOR APPLICATION NUMBER: US 60/139,650
  PRIOR FILING DATE: 1999-06-17
  PRIOR APPLICATION NUMBER: US 60/123,810
  PRIOR FILING DATE: 1999-03-11
  PRIOR APPLICATION NUMBER: US 60/102,748
  PRIOR FILING DATE: 1998-10-02
  NUMBER OF SEQ ID NOS: 72
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 35
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Description of Artificial Sequence: Synthetic PKS
    OTHER INFORMATION: synthase fragment
US-09-940-316B-35
                         27.3%; Score 3; DB 10; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative 0; Mismatches
                                                0; Indels
                                                                0; Gaps
                                                                            0;
  Matches
```

Qy

```
RESULT 40
US-09-940-316B-41
; Sequence 41, Application US/09940316B
; Publication No. US20030175901A1
; GENERAL INFORMATION:
  APPLICANT: KOSAN BIOSCIENCES, Inc.
  APPLICANT: REEVES, CHRISTOPHER
               CHU, DANIEL
  APPLICANT:
               KHOSLA, CHAITAN
  APPLICANT:
               SANTI, DANIEL
  APPLICANT:
               WU, KAI
  APPLICANT:
   TITLE OF INVENTION: POLYKETIDES ENCODING THE fkbA GENE OF THE FK-520
POLYKETIDE SYNTHASE
  TITLE OF INVENTION: GENE CLUSTER
  FILE REFERENCE: 30062-20026.11
  CURRENT APPLICATION NUMBER: US/09/940,316B
  CURRENT FILING DATE: 2001-08-27
  PRIOR APPLICATION NUMBER: 09/410,551
  PRIOR FILING DATE: 1999-10-01
  PRIOR APPLICATION NUMBER: US 60/139,650
   PRIOR FILING DATE: 1999-06-17
   PRIOR APPLICATION NUMBER: US 60/123,810
  PRIOR FILING DATE: 1999-03-11
  PRIOR APPLICATION NUMBER: US 60/102,748
   PRIOR FILING DATE: 1998-10-02
  NUMBER OF SEQ ID NOS: 72
   SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 41
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Description of Artificial Sequence: Synthetic PKS
    OTHER INFORMATION: synthase fragment
US-09-940-316B-41
  Query Match
                          27.3%; Score 3; DB 10; Length 11;
                          100.0%; Pred. No. 7.8e+03;
  Best Local Similarity
                               0; Mismatches
                                                   0;
                                                                  0; Gaps
                                                                              0;
 Matches
             3; Conservative
                                                       Indels
            8 PRR 10
Qу
              \perp
            3 PRR 5
RESULT 41
US-09-940-316B-53
; Sequence 53, Application US/09940316B
; Publication No. US20030175901A1
; GENERAL INFORMATION:
; APPLICANT: KOSAN BIOSCIENCES, Inc.
 APPLICANT: REEVES, CHRISTOPHER
; APPLICANT: CHU, DANIEL
```

```
APPLICANT:
              KHOSLA, CHAITAN
              SANTI, DANIEL
  APPLICANT:
  APPLICANT: WU, KAI
  TITLE OF INVENTION: POLYKETIDES ENCODING THE fkbA GENE OF THE FK-520
POLYKETIDE SYNTHASE
  TITLE OF INVENTION: GENE CLUSTER
  FILE REFERENCE: 30062-20026.11
  CURRENT APPLICATION NUMBER: US/09/940,316B
  CURRENT FILING DATE: 2001-08-27
  PRIOR APPLICATION NUMBER: 09/410,551
  PRIOR FILING DATE: 1999-10-01
  PRIOR APPLICATION NUMBER: US 60/139,650
  PRIOR FILING DATE: 1999-06-17
  PRIOR APPLICATION NUMBER: US 60/123,810
  PRIOR FILING DATE: 1999-03-11
  PRIOR APPLICATION NUMBER: US 60/102,748
  PRIOR FILING DATE: 1998-10-02
  NUMBER OF SEQ ID NOS: 72
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 53
   LENGTH: 11
    TYPE: PRT
   ORGANISM: Artificial Sequence
    FEATURE:
   OTHER INFORMATION: Description of Artificial Sequence: Synthetic PKS
   OTHER INFORMATION: synthase fragment
US-09-940-316B-53
                          27.3%; Score 3; DB 10; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative
                               0; Mismatches
                                                   0; Indels
                                                               0; Gaps
 Matches
            8 PRR 10
Qy
              \mathbf{I}
Db
            3 PRR 5
RESULT 42
US-09-818-683-330
; Sequence 330, Application US/09818683
; Publication No. US20030211472A1
; GENERAL INFORMATION:
; APPLICANT: Feng et al.
  TITLE OF INVENTION: 125 Human Secreted Proteins
  FILE REFERENCE: PZ020P1
  CURRENT APPLICATION NUMBER: US/09/818,683
  CURRENT FILING DATE: 2001-03-28
  Prior application data removed - consult PALM or file wrapper
  NUMBER OF SEQ ID NOS: 612
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 330
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Homo sapiens
US-09-818-683-330
                          27.3%; Score 3; DB 11; Length 11;
  Query Match
```

```
Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                         0;
           9 RRS 11
Qу
             -111
           2 RRS 4
Db
RESULT 43
US-09-784-553C-54
; Sequence 54, Application US/09784553C
; Publication No. US20040043378A1
; GENERAL INFORMATION:
  APPLICANT: ZHOU, MING-MING
  APPLICANT: AGGARWAL, ANEEL
 TITLE OF INVENTION: METHODS OF IDENTIFYING MODULATORS OF BROMODOMAINS
 FILE REFERENCE: 2459-1-003 CIP
  CURRENT APPLICATION NUMBER: US/09/784,553C
  CURRENT FILING DATE: 2003-07-08
 PRIOR APPLICATION NUMBER: 09/510,314
; PRIOR FILING DATE: 2000-02-22
; NUMBER OF SEQ ID NOS: 63
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 54
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: synthetic HIV-1 Tat peptide
   FEATURE:
   NAME/KEY: MOD RES
   LOCATION: (5)..(5)
   OTHER INFORMATION: acetylated lysine
US-09-784-553C-54
                         27.3%; Score 3; DB 12; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
           3; Conservative 0; Mismatches 0; Indels 0; Gaps
  Matches
                                                                           0;
           1 ARQ 3
Qy
             Db
           7 ARO 9
RESULT 44
US-09-973-278-650
; Sequence 650, Application US/09973278
; Publication No. US20040044191A1
; GENERAL INFORMATION:
; APPLICANT: Fischer et al.
  TITLE OF INVENTION: 123 Human Secreted Proteins
; FILE REFERENCE: PZ010P2
; CURRENT APPLICATION NUMBER: US/09/973,278
; CURRENT FILING DATE: 2001-10-10
; PRIOR APPLICATION NUMBER: 60/239,899
; PRIOR FILING DATE: 2000-10-13
; PRIOR APPLICATION NUMBER: 09/227,357
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PRIOR FILING DATE: 1999-01-08
  PRIOR APPLICATION NUMBER: PCT/US98/13684
  PRIOR FILING DATE: 1998-07-07
  PRIOR APPLICATION NUMBER: 60/051,926
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/052,793
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/051,925
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/051,929
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/052,803
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/052,732
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/051,931
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/051,932
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/051,916
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/051,930
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/051,918
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/051,920
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/052,733
  PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/052,795
  PRIOR FILING DATE: 1997-07-08
   PRIOR APPLICATION NUMBER: 60/051,919
  PRIOR FILING DATE: 1997-07-08
   PRIOR APPLICATION NUMBER: 60/051,928
   PRIOR FILING DATE: 1997-07-08
  PRIOR APPLICATION NUMBER: 60/055,722
  PRIOR FILING DATE: 1997-08-18
  PRIOR APPLICATION NUMBER: 60/055,723
  PRIOR FILING DATE: 1997-08-18
   PRIOR APPLICATION NUMBER: 60/055,948
   PRIOR FILING DATE: 1997-08-18
;
   PRIOR APPLICATION NUMBER: 60/055,949
;
   PRIOR FILING DATE: 1997-08-18
   PRIOR APPLICATION NUMBER: 60/055,953
   PRIOR FILING DATE: 1997-08-18
   PRIOR APPLICATION NUMBER: 60/055,950
   PRIOR FILING DATE: 1997-08-18
   PRIOR APPLICATION NUMBER: 60/055,947
   PRIOR FILING DATE: 1997-08-18
;
   PRIOR APPLICATION NUMBER: 60/055,964
   PRIOR FILING DATE: 1997-08-18
   PRIOR APPLICATION NUMBER: 60/056,360
   PRIOR FILING DATE: 1997-08-18
   PRIOR APPLICATION NUMBER: 60/055,684
   PRIOR FILING DATE: 1997-08-18
   PRIOR APPLICATION NUMBER: 60/055,984
   PRIOR FILING DATE: 1997-08-18
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PRIOR APPLICATION NUMBER: 60/055,954
  PRIOR FILING DATE: 1997-08-18
  PRIOR APPLICATION NUMBER: 60/058,785
  PRIOR FILING DATE: 1997-09-12
  PRIOR APPLICATION NUMBER: 60/058,664
  PRIOR FILING DATE: 1997-09-12
  PRIOR APPLICATION NUMBER: 60/058,660
  PRIOR FILING DATE: 1997-09-12
  PRIOR APPLICATION NUMBER: 60/058,661
  PRIOR FILING DATE: 1997-09-12
; NUMBER OF SEQ ID NOS: 947
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 650
   LENGTH: 11
    TYPE: PRT
   ORGANISM: Homo sapiens
US-09-973-278-650
                          27.3%; Score 3; DB 12; Length 11;
 Ouery Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
                                                                               0;
            3 OKT 5
              +
            5 OKT 7
RESULT 45
US-10-444-070-15
; Sequence 15, Application US/10444070
; Publication No. US20040029809A1
; GENERAL INFORMATION:
  APPLICANT: AVERBACK, PAUL
  TITLE OF INVENTION: SPHERON COMPONENTS USEFUL IN DETERMINING COMPOUNDS
  TITLE OF INVENTION: CAPABLE OF TREATING SYMPTOMS OF ALZHEIMER'S DISEASE, TITLE OF INVENTION: AND TREATMENTS AND ANIMAL MODELS PRODUCED THEREFROM
  FILE REFERENCE: 59003.000021
  CURRENT APPLICATION NUMBER: US/10/444,070
  CURRENT FILING DATE: 2003-05-23
  PRIOR APPLICATION NUMBER: 10/378,065
  PRIOR FILING DATE: 2003-03-04
  PRIOR APPLICATION NUMBER: 60/361,302
  PRIOR FILING DATE: 2002-03-04
  NUMBER OF SEQ ID NOS: 29
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 15
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    OTHER INFORMATION: Description of Artificial Sequence: Synthetic
    OTHER INFORMATION: peptide
US-10-444-070-15
                          27.3%; Score 3; DB 12; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
  Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps
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```

```
9 RRS 11
Qу
              I I I
           1 RRS 3
Db
RESULT 46
US-10-621-401-330
; Sequence 330, Application US/10621401
; Publication No. US20040038277A1
; GENERAL INFORMATION:
 APPLICANT: Rosen et al.
  TITLE OF INVENTION: 125 Human Secreted Proteins
  FILE REFERENCE: PZ020P2C1
  CURRENT APPLICATION NUMBER: US/10/621,401
  CURRENT FILING DATE: 2003-07-18
  PRIOR APPLICATION NUMBER: US 09/974,879
  PRIOR FILING DATE: 2001-10-12
  PRIOR APPLICATION NUMBER: US 60/239,893
  PRIOR FILING DATE: 2000-10-13
  PRIOR APPLICATION NUMBER: US 09/818,683
  PRIOR FILING DATE: 2001-03-28
  PRIOR APPLICATION NUMBER: US 09/305,736
  PRIOR FILING DATE: 1999-05-05
  PRIOR APPLICATION NUMBER: PCT/US98/23435
  PRIOR FILING DATE: 1998-11-04
  PRIOR APPLICATION NUMBER: US 60/064,911
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,912
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,983
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,900
  PRIOR FILING DATE: 1997-11-07
  PRIOR APPLICATION NUMBER: US 60/064,988
 PRIOR FILING DATE: 1997-11-07
  Remaining Prior Application data removed - See File Wrapper or PALM.
  NUMBER OF SEQ ID NOS: 611
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 330
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Homo sapiens
US-10-621-401-330
  Query Match
                         27.3%; Score 3; DB 12; Length 11;
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                              0; Mismatches
           3; Conservative
                                                 0; Indels
                                                                 0; Gaps
 Matches
            9 RRS 11
             2 RRS 4
Db
RESULT 47
US-10-620-462-7
; Sequence 7, Application US/10620462
```

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; Publication No. US20040047805A1
; GENERAL INFORMATION:
; APPLICANT: ROUGEOT, Catherine
 APPLICANT: ROUGEOT, Francois
  TITLE OF INVENTION: THERAPEUTIC USE OF THE SMR1 PROTEIN AND ACTIVE
DERIVATIVES THEREOF
  FILE REFERENCE: 0660-0158-0PCT
  CURRENT APPLICATION NUMBER: US/10/620,462
  CURRENT FILING DATE: 2003-07-17
  PRIOR APPLICATION NUMBER: US/09/367,703B
  PRIOR FILING DATE: 1999-10-13
  PRIOR APPLICATION NUMBER: PCT/EP98/00956
  PRIOR FILING DATE: 1998-02-19
  NUMBER OF SEQ ID NOS: 14
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 7
   LENGTH: 11
    TYPE: PRT
   ORGANISM: Rattus rattus
US-10-620-462-7
                         27.3%; Score 3; DB 12; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                                                               0; Gaps
            3; Conservative 0; Mismatches 0; Indels
                                                                             0;
           8 PRR 10
Qу
             -111
            4 PRR 6
Db
RESULT 48
US-10-146-221-15
; Sequence 15, Application US/10146221
; Publication No. US20020173006A1
; GENERAL INFORMATION:
; APPLICANT: Kim, Jin-Soo
; APPLICANT: Pabo, Carl O.
  APPLICANT: Massachusetts Institute of Technology
  TITLE OF INVENTION: Poly Zinc Finger Proteins With Improved Linkers
  FILE REFERENCE: 019496-002510US
  CURRENT APPLICATION NUMBER: US/10/146,221
  CURRENT FILING DATE: 2002-05-13
  PRIOR APPLICATION NUMBER: US/09/260,629
; PRIOR FILING DATE: 1999-03-01
  NUMBER OF SEQ ID NOS: 24
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 15
   LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Description of Artificial Sequence: longer flexible
    OTHER INFORMATION: linker for fusion protein 268//NRE containing a
    OTHER INFORMATION: Gly-Gly-Gly-Ser sequence
US-10-146-221-15
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27.3%; Score 3; DB 13; Length 11;

Query Match

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Best Local Similarity 100.0%; Pred. No. 7.8e+03;
         3; Conservative 0; Mismatches 0; Indels 0; Gaps
                                                                            0;
           2 RQK 4
Qу
             \perp \perp \perp \perp
           1 ROK 3
Db
RESULT 49
US-10-125-452-29
; Sequence 29, Application US/10125452
; Publication No. US20020173640A1
; GENERAL INFORMATION:
  APPLICANT: Ruben et al.
  TITLE OF INVENTION: ADAM Polynucleotides, Polypeptides, and Antibodies
  FILE REFERENCE: PT006P2
  CURRENT APPLICATION NUMBER: US/10/125,452
  CURRENT FILING DATE: 2002-04-19
  PRIOR APPLICATION NUMBER: 09/955,504
  PRIOR FILING DATE: 2001-09-19
  PRIOR APPLICATION NUMBER: 09/712,907
  PRIOR FILING DATE: 2000-11-16
  PRIOR APPLICATION NUMBER: PCT/US00/14308
  PRIOR FILING DATE: 2000-05-25
; PRIOR APPLICATION NUMBER: 60/178,717
; PRIOR FILING DATE: 2000-01-28
  PRIOR APPLICATION NUMBER: 60/142,930
  PRIOR FILING DATE: 1999-07-09
  PRIOR APPLICATION NUMBER: 60/136,388
; PRIOR FILING DATE: 1999-05-27
; NUMBER OF SEQ ID NOS: 38
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 29
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-10-125-452-29
 Query Match
                         27.3%; Score 3; DB 13; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches 3; Conservative 0; Mismatches
                                                0; Indels
                                                               0; Gaps
                                                                            0;
           8 PRR 10
Qу
             -111
Db
           3 PRR 5
RESULT 50
US-10-180-326-5
; Sequence 5, Application US/10180326
; Publication No. US20030049661A1
; GENERAL INFORMATION:
; APPLICANT: Seino, Susumu
; APPLICANT: Shibasaki, Tadao
; APPLICANT: Ozaki, No. US20030049661A1uaki
; TITLE OF INVENTION: Protein Rim2
; FILE REFERENCE: P21573
```

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CURRENT APPLICATION NUMBER: US/10/180,326
 CURRENT FILING DATE: 2002-06-27
 PRIOR APPLICATION NUMBER: JP 288372/99
 PRIOR FILING DATE: 1999-10-08<160> 5
 NUMBER OF SEQ ID NOS:
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 5
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Mus musculus
US-10-180-326-5
                         27.3%; Score 3; DB 14; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative 0; Mismatches
                                                                             0;
                                                0; Indels
                                                                 0; Gaps
           8 PRR 10
Qy
             8 PRR 10
RESULT 51
US-10-003-978A-3
; Sequence 3, Application US/10003978A
; Publication No. US20030072747A1
   GENERAL INFORMATION:
        APPLICANT: Cousens, Lawrence S.
                   Eberhardt, Christine D.
                   Gray, Patrick W.
                   Le Trong, Hai
                    Tjoelker, Larry W.
                   Wilder, Cheryl L.
        TITLE OF INVENTION: Platelet-Activating Factor
                            Acetylhydrolase
        NUMBER OF SEQUENCES: 30
         CORRESPONDENCE ADDRESS:
              ADDRESSEE: Marshall, Gerstein & Borun
              STREET: 6300 Sears Tower, 233 South Wacker Drive
              CITY: Chicago
              STATE: Illinois
              COUNTRY: United States of America
              ZIP: 60606-6357
         COMPUTER READABLE FORM:
              MEDIUM TYPE: Floppy disk
              COMPUTER: IBM PC compatible
              OPERATING SYSTEM: PC-DOS/MS-DOS
              SOFTWARE: PatentIn Release #1.0, Version #1.25
         CURRENT APPLICATION DATA:
              APPLICATION NUMBER: US/10/003,978A
              FILING DATE: 23-Oct-2001
              CLASSIFICATION: <Unknown>
         PRIOR APPLICATION DATA:
              APPLICATION NUMBER: US 09/729,402
              FILING DATE: 04-DEC-2000
              APPLICATION NUMBER: US 09/577,758
              FILING DATE: 23-MAY-2000
              APPLICATION NUMBER: US 09/010,715
```

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FILING DATE: 22-JAN-1998
             APPLICATION NUMBER: US 08/480,658
             FILING DATE: 07-JUN-1995
             APPLICATION NUMBER: US 08/318,905
              FILING DATE: 06-OCT-1994
             APPLICATION NUMBER: US 08/133,803
              FILING DATE: 06-OCT-1993
        ATTORNEY/AGENT INFORMATION:
             NAME: No. US20030072747Aland, Greta E.
             REGISTRATION NUMBER: 35,302
             REFERENCE/DOCKET NUMBER: 27866/37792
        TELECOMMUNICATION INFORMATION:
             TELEPHONE: (312) 474-6300
             TELEFAX: (312) 474-0448
   INFORMATION FOR SEQ ID NO: 3:
        SEQUENCE CHARACTERISTICS:
;
             LENGTH: 11 amino acids
;
             TYPE: amino acid
             TOPOLOGY: linear
        MOLECULE TYPE: peptide
        SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-10-003-978A-3
                         27.3%; Score 3; DB 14; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
          3; Conservative 0; Mismatches
 Matches
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                                                       Indels
                                                                 0;
                                                                             0;
            6 MKP 8
Qy
             \perp
           1 MKP 3
RESULT 52
US-10-077-555-5
; Sequence 5, Application US/10077555
; Publication No. US20030077289A1
; GENERAL INFORMATION:
  APPLICANT: Wang, Rong-fu
  TITLE OF INVENTION: Use of Cell-Penetrating Peptides to Generate Antitumor
Immunity
  FILE REFERENCE: P02373US1/10200806
  CURRENT APPLICATION NUMBER: US/10/077,555
  CURRENT FILING DATE: 2002-02-15
  PRIOR APPLICATION NUMBER: US 60/268,687
  PRIOR FILING DATE: 2001-02-15
  NUMBER OF SEQ ID NOS: 14
  SOFTWARE: PatentIn version 3.1
 SEQ ID NO 5
;
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Synthetic Peptide
US-10-077-555-5
                         27.3%; Score 3; DB 14; Length 11;
 Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
```

```
Matches 3; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
            1 ARQ 3
QУ
             \parallel \parallel \parallel \parallel
            6 ARQ 8
RESULT 53
US-10-024-535A-6
; Sequence 6, Application US/10024535A
; Publication No. US20030078200A1
; GENERAL INFORMATION:
  APPLICANT: MARCEL et al.
  TITLE OF INVENTION: Therapeutic methods and compositions for the treatment
  TITLE OF INVENTION: of impaired interpersonal and behavioral disorders
  FILE REFERENCE: P07479US01/BAS
  CURRENT APPLICATION NUMBER: US/10/024,535A
  CURRENT FILING DATE: 2001-12-21
  PRIOR APPLICATION NUMBER: PCT/EP00/06259
  PRIOR FILING DATE: 2000-06-22
  PRIOR APPLICATION NUMBER: US/140,563
 PRIOR FILING DATE: 1999-06-23
 NUMBER OF SEQ ID NOS: 10
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
   LENGTH: 11
;
   TYPE: PRT
   ORGANISM: Artificial Sequence
    OTHER INFORMATION: This is a peptide sequence that was designed to achieve
therapeutic
    OTHER INFORMATION: effects in mammals.
US-10-024-535A-6
  Query Match
                          27.3%; Score 3; DB 14; Length 11;
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                              0; Mismatches
  Matches
            3; Conservative
                                                0; Indels
                                                                 0; Gaps
                                                                             0;
            8 PRR 10
Qу
              111
            4 PRR 6
Db
RESULT 54
US-10-006-869-3080
; Sequence 3080, Application US/10006869
; Publication No. US20030082166A1
; GENERAL INFORMATION:
  APPLICANT: Blaschuk, Orest W.
  APPLICANT: Symonds, James Matthew
;
  APPLICANT: Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
  TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C7
  CURRENT APPLICATION NUMBER: US/10/006,869
   CURRENT FILING DATE: 2001-12-03
; NUMBER OF SEQ ID NOS: 4052
```

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SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 3080
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
    OTHER INFORMATION: Representative cyclic modulating agent based on
   OTHER INFORMATION: Desmoglein cell adhesion recognition sequence
US-10-006-869-3080
 Query Match
                          27.3%; Score 3; DB 14; Length 11;
                          100.0%;
                                  Pred. No. 7.8e+03;
 Best Local Similarity
                                 0; Mismatches
                                                   0;
                                                       Indels
                                                                  0;
                                                                              0;
             3; Conservative
                                                                     Gaps
            3 OKT 5
Qу
              111
            7 QKT 9
Db
RESULT 55
US-10-006-869-3125
; Sequence 3125, Application US/10006869
; Publication No. US20030082166A1
; GENERAL INFORMATION:
  APPLICANT: Blaschuk, Orest W.
  APPLICANT: Symonds, James Matthew
  APPLICANT: Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
  TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C7
  CURRENT APPLICATION NUMBER: US/10/006,869
  CURRENT FILING DATE: 2001-12-03
  NUMBER OF SEQ ID NOS: 4052
   SOFTWARE: PatentIn Ver. 2.0
;
 SEQ ID NO 3125
    LENGTH: 11
;
   TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Representative cyclic modulating agent based on
    OTHER INFORMATION: Desmoglein cell adhesion recognition sequence
US-10-006-869-3125
                          27.3%; Score 3; DB 14; Length 11;
  Query Match
                          100.0%;
  Best Local Similarity
                                   Pred. No. 7.8e+03;
 Matches
                                 0; Mismatches
                                                                              0;
            3; Conservative
                                                   0;
                                                       Indels
                                                                  0;
                                                                     Gaps
            3 QKT 5
Qу
              | | |
            7 QKT 9
RESULT 56
US-10-006-869-3170
; Sequence 3170, Application US/10006869
; Publication No. US20030082166A1
; GENERAL INFORMATION:
```

```
APPLICANT: Blaschuk, Orest W.
  APPLICANT: Symonds, James Matthew
  APPLICANT:
              Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
  TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C7
  CURRENT APPLICATION NUMBER: US/10/006,869
  CURRENT FILING DATE: 2001-12-03
  NUMBER OF SEQ ID NOS: 4052
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3170
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
    FEATURE:
   OTHER INFORMATION: Representative cyclic modulating agent based on
    OTHER INFORMATION: Desmoglein cell adhesion recognition sequence
US-10-006-869-3170
  Query Match
                         27.3%; Score 3; DB 14; Length 11;
                         100.0%; Pred. No. 7.8e+03;
  Best Local Similarity
            3; Conservative
                                0; Mismatches
                                                0; Indels
                                                                0; Gaps
                                                                            0;
            3 QKT 5
Qy
              \mathbf{I}
Db
            7 QKT 9
RESULT 57
US-10-006-869-3215
; Sequence 3215, Application US/10006869
; Publication No. US20030082166A1
; GENERAL INFORMATION:
  APPLICANT: Blaschuk, Orest W.
  APPLICANT: Symonds, James Matthew
  APPLICANT: Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
  TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C7
  CURRENT APPLICATION NUMBER: US/10/006,869
  CURRENT FILING DATE: 2001-12-03
  NUMBER OF SEQ ID NOS: 4052
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3215
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Representative cyclic modulating agent based on
    OTHER INFORMATION: Desmoglein cell adhesion recognition sequence
US-10-006-869-3215
  Query Match
                         27.3%; Score 3; DB 14; Length 11;
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative 0; Mismatches
                                                0; Indels
                                                                0; Gaps
                                                                            0;
           3 QKT 5
QУ
```

```
RESULT 58
US-10-006-869-3260
; Sequence 3260, Application US/10006869
; Publication No. US20030082166A1
; GENERAL INFORMATION:
; APPLICANT: Blaschuk, Orest W.
  APPLICANT: Symonds, James Matthew
  APPLICANT: Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
  TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C7
  CURRENT APPLICATION NUMBER: US/10/006,869
  CURRENT FILING DATE: 2001-12-03
  NUMBER OF SEQ ID NOS: 4052
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3260
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Representative cyclic modulating agent based on
    OTHER INFORMATION: Desmoglein cell adhesion recognition sequence
US-10-006-869-3260
                          27.3%; Score 3; DB 14; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches
            3; Conservative
                               0: Mismatches
                                                   0; Indels
                                                                 0; Gaps
Qy
            3 QKT 5
              +11
Db
            7 QKT 9
RESULT 59
US-10-229-915-22
; Sequence 22, Application US/10229915
; Publication No. US20030083262A1
; GENERAL INFORMATION:
  APPLICANT: Lazarus, Douglas
  APPLICANT: Hannig, Gerhard
  TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR TREATING INFLAMMATORY
  TITLE OF INVENTION: DISORDERS
  FILE REFERENCE: PPI-127
  CURRENT APPLICATION NUMBER: US/10/229,915
  CURRENT FILING DATE: 2002-08-27
   PRIOR APPLICATION NUMBER: US 60/316,328
  PRIOR FILING DATE: 2001-08-30
;
  NUMBER OF SEQ ID NOS: 39
  SOFTWARE: FastSEQ for Windows Version 4.0
; SEO ID NO 22
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial Sequence
```

```
OTHER INFORMATION: anti-inflammatory compound
US-10-229-915-22
                          27.3%; Score 3; DB 14; Length 11;
  Query Match
                          100.0%; Pred. No. 7.8e+03;
  Best Local Similarity
                                                                               0;
             3; Conservative 0; Mismatches
                                                 0; Indels
                                                                  0; Gaps
            1 ARQ 3
Qу
              +++
            6 ARQ 8
Db
RESULT 60
US-10-192-867-5
; Sequence 5, Application US/10192867
; Publication No. US20030084466A1
: GENERAL INFORMATION:
  APPLICANT: BLUME-JENSEN, Peter
  APPLICANT: HUNTER, Tony
   TITLE OF INVENTION: SYSTEM AND METHOD FOR CONTROLLING MALE FERTILITY
   FILE REFERENCE: SALKINS.002C1
   CURRENT APPLICATION NUMBER: US/10/192,867
   CURRENT FILING DATE: 2002-07-08
   PRIOR APPLICATION NUMBER: US 60/175,625
     2000-01-11
;
   PRIOR APPLICATION NUMBER: PCT/US01/00573
     2001-01-08
   NUMBER OF SEQ ID NOS: 6
  SOFTWARE: FastSEQ for Windows Version 4.0
;
 SEQ ID NO 5
    LENGTH: 11
;
    TYPE: PRT
    ORGANISM: Artificial Sequence
    FEATURE:
    OTHER INFORMATION: Artificial Peptide
    FEATURE:
    NAME/KEY: PHOSPHORYLATION
    LOCATION: 4
    OTHER INFORMATION: Phosphorylated Tyrosine
US-10-192-867-5
                          27.3%; Score 3; DB 14; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative
                               0; Mismatches 0; Indels
                                                                   0; Gaps
                                                                               0;
  Matches
            6 MKP 8
Qy
              \parallel \parallel \parallel \parallel
Db
            7 MKP 9
RESULT 61
US-10-211-088-297
; Sequence 297, Application US/10211088
; Publication No. US20030104479A1
; GENERAL INFORMATION:
; APPLICANT: Bright, Gary R.
```

FEATURE:

```
APPLICANT: Premkumar, D. David
  APPLICANT: Chen, Yih-Tai
  TITLE OF INVENTION: No. US20030104479A1el Fusion Proteins And Assays For
Molecular Binding
  FILE REFERENCE: 01-1022-US
  CURRENT APPLICATION NUMBER: US/10/211,088
  CURRENT FILING DATE: 2002-10-15
  PRIOR APPLICATION NUMBER: 60/309,395
  PRIOR FILING DATE: 2001-08-01
  PRIOR APPLICATION NUMBER: 60/341,589
  PRIOR FILING DATE: 2001-12-13
  NUMBER OF SEQ ID NOS: 366
  SOFTWARE: PatentIn version 3.1
 SEQ ID NO 297
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial sequence
    FEATURE:
   OTHER INFORMATION: Protein-derived transport peptide
US-10-211-088-297
                          27.3%; Score 3; DB 14; Length 11;
  Query Match
                          100.0%; Pred. No. 7.8e+03;
  Best Local Similarity
                                0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
                                                                             0;
            3; Conservative
            1 ARQ 3
Qy
              \square
            6 ARQ 8
RESULT 62
US-10-136-738-3
; Sequence 3, Application US/10136738
; Publication No. US20030108886A1
; GENERAL INFORMATION:
  APPLICANT: Finn, John
  APPLICANT: MacLachlan, Ian
  APPLICANT: Protiva Biotherapeutics Inc.
  TITLE OF INVENTION: Autogene Nucleic Acids Encoding a
  TITLE OF INVENTION:
                       Secretable RNA Polymerase
  FILE REFERENCE: 020801-000310US
  CURRENT APPLICATION NUMBER: US/10/136,738
;
  CURRENT FILING DATE: 2002-04-30
  PRIOR APPLICATION NUMBER: US 60/287,974
  PRIOR FILING DATE: 2001-04-30
  NUMBER OF SEQ ID NOS: 47
  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
    LENGTH: 11
;
   TYPE: PRT
    ORGANISM: Artificial Sequence
    OTHER INFORMATION: HIV-Tat variant secretion domain
US-10-136-738-3
  Query Match
                          27.3%; Score 3; DB 14; Length 11;
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
```

```
0;
 Matches
            3; Conservative
                                0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
            1 ARQ 3
Qу
              \perp
            6 ARQ 8
Db
RESULT 63
US-10-072-602B-502
; Sequence 502, Application US/10072602B
; Publication No. US20030109670A1
; GENERAL INFORMATION:
  APPLICANT: University of Utah Research Foundation
              Cognetix, Inc.
  APPLICANT:
               Olivera, Baldomero M.
  APPLICANT:
  APPLICANT: McIntosh, J, Michael
  APPLICANT: Watkins, Maren
  APPLICANT: Garrett, James E.
  APPLICANT: Cruz, Lourdes J.
              Grilley, Michelle
  APPLICANT:
               Schoenfeld, Robert M.
  APPLICANT:
               Walker, Craig
  APPLICANT:
              Shetty, Reshma
  APPLICANT:
              Jones, Robert M.
  APPLICANT:
  TITLE OF INVENTION: Cone Snail Peptides
  FILE REFERENCE: 2314-249
  CURRENT APPLICATION NUMBER: US/10/072,602B
  CURRENT FILING DATE: 2002-02-11
  PRIOR APPLICATION NUMBER: US 60/267,408
  PRIOR FILING DATE: 2001-02-09
  NUMBER OF SEQ ID NOS: 638
  SOFTWARE: PatentIn version 3.0
 SEQ ID NO 502
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Conus caracteristicus
US-10-072-602B-502
  Query Match
                          27.3%; Score 3; DB 14; Length 11;
                          100.0%; Pred. No. 7.8e+03;
  Best Local Similarity
            3; Conservative
                               0; Mismatches
                                                 0;
                                                       Indels
                                                                 0; Gaps
                                                                             0;
            8 PRR 10
Qу
              111
Db
            3 PRR 5
RESULT 64
US-10-230-381-57
; Sequence 57, Application US/10230381
; Publication No. US20030152591A1
; GENERAL INFORMATION:
; APPLICANT: Innogenetics N.V.
; TITLE OF INVENTION: New hepatitis C virus genotype 13, and its use as
prophylactic,
; TITLE OF INVENTION: therapeutic and diagnostic agents
; FILE REFERENCE: INNX-124-EP
```

```
CURRENT APPLICATION NUMBER: US/10/230,381
  CURRENT FILING DATE: 2002-08-29
 NUMBER OF SEQ ID NOS: 63
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 57
   LENGTH: 11
   TYPE: PRT
   ORGANISM: hepatitis C virus
US-10-230-381-57
                         27.3%; Score 3; DB 14; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches
            3; Conservative 0; Mismatches 0; Indels
                                                                0; Gaps
                                                                            0;
           1 ARQ 3
Qу
             1 ARQ 3
Db
RESULT 65
US-10-231-894-4
; Sequence 4, Application US/10231894
; Publication No. US20030153490A1
; GENERAL INFORMATION:
; APPLICANT: Avrameas, Eustrate
  TITLE OF INVENTION: Compositions and Methods of Treating Diabetes
  FILE REFERENCE: 20440-004
  CURRENT APPLICATION NUMBER: US/10/231,894
  CURRENT FILING DATE: 2002-08-29
  PRIOR APPLICATION NUMBER: 60/316,063
  PRIOR FILING DATE: 2001-08-30
  NUMBER OF SEQ ID NOS: 56
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Mus musculus x Rattus norvegicus
US-10-231-894-4
                         27.3%; Score 3; DB 14; Length 11;
 Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches
            3; Conservative
                               0; Mismatches 0; Indels
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           2 RQK 4
Qу
             +111
           1 ROK 3
RESULT 66
US-10-286-457-327
; Sequence 327, Application US/10286457
; Publication No. US20030166004A1
; GENERAL INFORMATION:
; APPLICANT: JENO GYURIS et al.
; TITLE OF INVENTION: ENDOTHELIAL-CELL BINDING PEPTIDES FOR DIAGNOSIS AND
THERAPY
; FILE REFERENCE: GPCI-P01-178
```

```
; CURRENT APPLICATION NUMBER: US/10/286,457
; CURRENT FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: 60/334822
; PRIOR FILING DATE: 2001-11-01
; NUMBER OF SEQ ID NOS: 684
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 327
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: artificial sequence isolated from random peptide
libraries, based on
    OTHER INFORMATION: ability to selectively bind to endothelial cells
US-10-286-457-327
                          27.3%; Score 3; DB 14; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
           3; Conservative 0; Mismatches 0; Indels
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                                                                 0; Gaps
 Matches
            6 MKP 8
Qу
             5 MKP 7
Db
RESULT 67
US-10-286-457-646
; Sequence 646, Application US/10286457
; Publication No. US20030166004A1
; GENERAL INFORMATION:
  APPLICANT: JENO GYURIS et al.
  TITLE OF INVENTION: ENDOTHELIAL-CELL BINDING PEPTIDES FOR DIAGNOSIS AND
THERAPY
; FILE REFERENCE: GPCI-P01-178
  CURRENT APPLICATION NUMBER: US/10/286,457
; CURRENT FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: 60/334822
  PRIOR FILING DATE: 2001-11-01
; NUMBER OF SEQ ID NOS: 684
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 646
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
    OTHER INFORMATION: artificial sequence isolated from random peptide
libraries, based on
    OTHER INFORMATION: ability to selectively bind to endothelial cells
    FEATURE:
   NAME/KEY: MISC FEATURE
   LOCATION: (1)..(4)
   OTHER INFORMATION: Xaa represents an amino acid with a small side chain,
e.g., Ala o
   OTHER INFORMATION: r Cys or Asp or Gly or Asn or Pro or Ser or Thr or Val
   FEATURE:
   NAME/KEY: MISC FEATURE
   LOCATION: (10)..(10)
```

```
US-10-286-457-646
  Query Match
                          27.3%; Score 3; DB 14; Length 11;
                          100.0%; Pred. No. 7.8e+03;
  Best Local Similarity
            3; Conservative 0; Mismatches
                                                  0; Indels
                                                                 0; Gaps
                                                                              0;
  Matches
            6 MKP 8
Qу
              \parallel \parallel \parallel
            5 MKP 7
Db
RESULT 68
US-10-293-580-35
; Sequence 35, Application US/10293580
; Publication No. US20030170767A1
; GENERAL INFORMATION:
; APPLICANT: Aurora Biosciences Corporation
 APPLICANT: Cubitt, Andrew B.
 TITLE OF INVENTION: Fluorescent Protein Sensors of Post-Translational
Modifications
; FILE REFERENCE: AURO1270 (08366/031001)
   CURRENT APPLICATION NUMBER: US/10/293,580
  CURRENT FILING DATE: 2002-11-12
; PRIOR APPLICATION NUMBER: US/09/129,192
  PRIOR FILING DATE: 1998-07-24
  NUMBER OF SEQ ID NOS: 74
  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 35
    LENGTH: 11
    TYPE: PRT
    ORGANISM: Artificial sequence
    FEATURE:
    OTHER INFORMATION: phosphorylation site inserted at the N-terminus
US-10-293-580-35
  Query Match
                          27.3%; Score 3; DB 14; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 7.8e+03;
            3; Conservative
                              0; Mismatches
                                                  0; Indels
                                                                  0; Gaps
                                                                              0;
  Matches
            9 RRS 11
Qу
              \perp
Db
            4 RRS 6
RESULT 69
US-10-161-791-290
; Sequence 290, Application US/10161791
; Publication No. US20030186863A1
   GENERAL INFORMATION:
     APPLICANT: SPARKS, Andrew B.
                 KAY, Brian K.
     APPLICANT:
     APPLICANT: THORN, Judith M.
     APPLICANT: QUILLIAM, Lawrence A.
                 DER, Channing J.
     APPLICANT:
     APPLICANT:
                 FOWLKES, Dana M.
     APPLICANT:
                 RIDER, James E.
```

; OTHER INFORMATION: Xaa represents any amino acid residue

```
TITLE OF INVENTION: SH3 BINDING PEPTIDES AND METHODS OF
    TITLE OF INVENTION: ISOLATING AND USING SAME
    NUMBER OF SEQUENCES: 467
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Pennie & Edmonds
      STREET: 1155 Avenue of the Americas
      CITY: New York
      STATE: New York
      COUNTRY: U.S.A.
      ZIP: 10036-2711
    COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.30
;
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/10/161,791
      FILING DATE:
      CLASSIFICATION:
    PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US/08/602,999
       FILING DATE: 16-FEB-1996
    ATTORNEY/AGENT INFORMATION:
;
      NAME: Misrock, S. Leslie
       REGISTRATION NUMBER: 18,872
       REFERENCE/DOCKET NUMBER:
                               1101-202
    TELECOMMUNICATION INFORMATION:
       TELEPHONE: (212) 790-9090
       TELEFAX: (212) 869-9741/8864
       TELEX: 66141 PENNIE
   INFORMATION FOR SEQ ID NO: 290:
    SEQUENCE CHARACTERISTICS:
;
       LENGTH: 11 amino acids
       TYPE: amino acid
       TOPOLOGY: unknown
    MOLECULE TYPE: peptide
US-10-161-791-290
                         27.3%; Score 3; DB 14; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                                                                0; Gaps
                                                                            0;
            3; Conservative 0; Mismatches 0;
                                                      Indels
            8 PRR 10
Qy
             +111
            8 PRR 10
RESULT 70
US-10-405-339-14
; Sequence 14, Application US/10405339
; Publication No. US20030190364A1
; GENERAL INFORMATION:
  APPLICANT: Panitch, Alyssa
  APPLICANT: Seal, Brandon
  TITLE OF INVENTION: Biological Affinity Based Delivery Systems
; FILE REFERENCE: 9138-0079US
  CURRENT APPLICATION NUMBER: US/10/405,339
```

```
CURRENT FILING DATE: 2003-04-01
  PRIOR APPLICATION NUMBER: US 60/369,568
 PRIOR FILING DATE: 2002-04-01
 NUMBER OF SEQ ID NOS: 60
  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 14
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial sequence
   FEATURE:
   OTHER INFORMATION: Synthetic peptide
US-10-405-339-14
                         27.3%; Score 3; DB 14; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
                               0; Mismatches
                                                 0; Indels
                                                                0; Gaps
                                                                            0;
 Matches
           3; Conservative
           1 ARQ 3
Qу
             +111
           6 ARO 8
Db
RESULT 71
US-10-231-889-4
; Sequence 4, Application US/10231889
; Publication No. US20030199677A1
; GENERAL INFORMATION:
  APPLICANT: Avrameas, Eustrate
  APPLICANT: Ternynck, Therese
  TITLE OF INVENTION: Amino Acid Sequences Facilitating Penetration Of A
Substance Of Interest
  TITLE OF INVENTION: Into Cells And/Or Nuclei
  FILE REFERENCE: 20440-001
  CURRENT APPLICATION NUMBER: US/10/231,889
  CURRENT FILING DATE: 2002-08-29
  PRIOR APPLICATION NUMBER: PCT/FR00/02621
  PRIOR FILING DATE: 2001-03-01
; PRIOR APPLICATION NUMBER: FR00/02621
  PRIOR FILING DATE: 2000-03-01
  NUMBER OF SEQ ID NOS: 51
  SOFTWARE: PatentIn Ver. 2.1
;
; SEQ ID NO 4
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Mus musculus x Rattus norvegicus
US-10-231-889-4
                         27.3%; Score 3; DB 14; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
 Matches 3; Conservative
                               0; Mismatches
                                                0; Indels
                                                                0; Gaps
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           2 RQK 4
Qу
             -1111
Db
            1 RQK 3
```

```
US-10-285-394-292
; Sequence 292, Application US/10285394
; Publication No. US20030228583A1
; GENERAL INFORMATION:
  APPLICANT: AMACHER, DAVID E.
  APPLICANT: FASULO, LISA M.
  APPLICANT: HERATH, HERATH MUDIYANSELAGE ATHULA CHANDRASIRI
  APPLICANT: HOLT, GORDON DUANE
  APPLICANT: STIGER, THOMAS R.
  TITLE OF INVENTION: BIOMARKERS OF LIVER RESPONSE
  FILE REFERENCE: POA-003.01
  CURRENT APPLICATION NUMBER: US/10/285,394
  CURRENT FILING DATE: 2003-02-07
  PRIOR APPLICATION NUMBER: 60/335,964
  PRIOR FILING DATE: 2001-10-31
 NUMBER OF SEQ ID NOS: 412
  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 292
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Homo sapiens
US-10-285-394-292
                         27.3%; Score 3; DB 15; Length 11;
 Query Match
                         100.0%; Pred. No. 7.8e+03;
 Best Local Similarity
                              0; Mismatches 0;
                                                                 0; Gaps
                                                      Indels
                                                                             0;
            3; Conservative
 Matches
Qy
            7 KPR 9
              \mathbf{I}
            9 KPR 11
Db
RESULT 73
US-10-395-032-3080
; Sequence 3080, Application US/10395032
; Publication No. US20030229199A1
; GENERAL INFORMATION:
  APPLICANT: Blaschuk, Orest W.
  APPLICANT: Symonds, James Matthew
  APPLICANT: Gour, Barbara J.
   TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
  TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C9
  CURRENT APPLICATION NUMBER: US/10/395,032
  CURRENT FILING DATE: 2003-03-21
  NUMBER OF SEQ ID NOS: 4052
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3080
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
   FEATURE:
   OTHER INFORMATION: Representative cyclic modulating agent based on
   OTHER INFORMATION: Desmoglein cell adhesion recognition sequence
US-10-395-032-3080
                         27.3%; Score 3; DB 15; Length 11;
  Query Match
```

```
Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative
                              0; Mismatches 0; Indels
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            3 OKT 5
QУ
             \pm 111
Dh
            7 QKT 9
RESULT 74
US-10-395-032-3125
; Sequence 3125, Application US/10395032
; Publication No. US20030229199A1
; GENERAL INFORMATION:
  APPLICANT: Blaschuk, Orest W.
  APPLICANT: Symonds, James Matthew
  APPLICANT: Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
  TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C9
  CURRENT APPLICATION NUMBER: US/10/395.032
  CURRENT FILING DATE: 2003-03-21
  NUMBER OF SEQ ID NOS: 4052
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3125
   LENGTH: 11
   TYPE: PRT
   ORGANISM: Artificial Sequence
    OTHER INFORMATION: Representative cyclic modulating agent based on
   OTHER INFORMATION: Desmoglein cell adhesion recognition sequence
US-10-395-032-3125
 Query Match
                         27.3%; Score 3;
                                           DB 15; Length 11;
 Best Local Similarity
                         100.0%; Pred. No. 7.8e+03;
 Matches
            3; Conservative
                               0; Mismatches
                                                 0; Indels
                                                                             0;
                                                                 0; Gaps
           3 QKT 5
Qy
             III
Db
           7 QKT 9
RESULT 75
US-10-395-032-3170
; Sequence 3170, Application US/10395032
; Publication No. US20030229199A1
; GENERAL INFORMATION:
  APPLICANT: Blaschuk, Orest W.
  APPLICANT: Symonds, James Matthew
  APPLICANT: Gour, Barbara J.
  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR MODULATING NONCLASSICAL
  TITLE OF INVENTION: CADHERIN-MEDIATED FUNCTIONS
  FILE REFERENCE: 100086.407C9
  CURRENT APPLICATION NUMBER: US/10/395,032
  CURRENT FILING DATE: 2003-03-21
  NUMBER OF SEQ ID NOS: 4052
  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3170
```

```
LENGTH: 11
;
   TYPE: PRT
   ORGANISM: Artificial Sequence
   OTHER INFORMATION: Representative cyclic modulating agent based on
   OTHER INFORMATION: Desmoglein cell adhesion recognition sequence
US-10-395-032-3170
                         27.3%; Score 3; DB 15; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 7.8e+03;
            3; Conservative 0; Mismatches 0; Indels
                                                                           0;
                                                               0; Gaps
           3 QKT 5
Qу
             +111
           7 QKT 9
Db
```

Search completed: April 8, 2004, 16:35:45
Job time : 31.3077 secs

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OM protein - protein search, using sw model

Run on: April 8, 2004, 15:30:07; Search time 27.7692 Seconds

(without alignments)

124.984 Million cell updates/sec

Title: US-09-787-443A-12

Perfect score: 11

Sequence: 1 ARQKTMKPRRS 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 1017041 seqs, 315518202 residues

Word size:

Total number of hits satisfying chosen parameters: 460

Minimum DB seq length: 11. Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Database: SPTREMBL 25:*

1: sp_archea:*

2: sp bacteria:*

3: sp fungi:*

4: sp_human:*

5: sp invertebrate:*

6: sp_mammal:*

7: sp_mhc:*

8: sp_organelle:*

9: sp phage:*

10: sp_plant:*

11: sp rodent:*

12: sp virus:*

13: sp vertebrate:*

14: sp unclassified:*

15: sp rvirus:*

16: sp_bacteriap:*

17: sp archeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result Query

No. Score Match Length DB ID Description

1	3	27.3	11	2	Q47345	047345	escherichia
2	3	27.3	11	8	Q8SKP8		ctenophorus
3	2	18.2	11	2	Q9R790		borrelia ga
4	2	18.2	11	2	Q8RKN1		escherichia
5	2	18.2	11	2	Q8L2T4		neisseria m
6	2	18.2	11	2			
7	2	18.2			Q9R7U8		pseudomonas
			11	2	Q9S618		prochloroco
8	2	18.2	11	2	P77404		escherichia
9	2	18.2	11	2	Q9RQ60	_	buchnera ap
10	2	18.2	11	2	Q93RM6		staphylococ
11	2	18.2	11	2	Q47600		escherichia
12	2	18.2	11	2	Q9K332		staphylococ
13	2	18.2	11	2	Q44090	Q44090	acholeplasm
14	2	18.2	11	2	Q56413	Q56413	escherichia
15	2	18.2	11	2	Q9R872	Q9r872	escherichia
16	2	18.2	11	2	Q9R446	Q9r446	neisseria g
17	2	18.2	11	2	Q7X566	Q7x566	thermus the
18	2	18.2	11	3	Q9HFN8		candida rug
19	2	18.2	11	4	Q9Y3G2		homo sapien
20	2	18.2	11	4	Q9H4H5		homo sapien
21	2	18.2	11	4	Q15997		homo sapien
22	2	18.2	11	4	Q9UCP5		homo sapien
23	2	18.2	11	5	Q26092		pisaster oc
24	2	18.2	11	5	Q25916		plasmodium
25	2	18.2	11	5	Q9NFX0		drosophila
26	2	18.2	11	5	Q8MPQ3		caenorhabdi
27	2	18.2	11	5	P82699		leucophaea
28	2	18.2	11	5	P82700		leucophaea
29	2	18.2	11	5	Q95PX6		caenorhabdi
30	2	18.2	11	6	Q9XSP7		pygathrix n
31	2	18.2	11	6	Q9XSP2		hylobates s
32	2	18.2	11	6	Q9XSP5		pan troglod
33	2	18.2	11	6	Q9XSP8		presbytis j
34	2	18.2	11	6	Q9XSP6		pongo pygma
35	2	18.2	11	6	Q9XSQ4		gorilla gor
36	2	18.2	11	7	077872		oreochromis
37	2	18.2	11	7	077873		oreochromis
38	2	18.2	11	7	077871		oreochromis
39	2	18.2		8			
	2		11	8	Q94V94		varanus sto
40	_	18.2	11	_	Q9G5W2		laudakia tu
41 42	2	18.2 18.2	11	8	Q9G622		salea horsf
43	2 2		11	8	Q9G5Y6		agama agama
		18.2	11	8	Q9G5W5		laudakia nu
44	2	18.2	11	8	Q8SKQ7		ctenophorus
45	2	18.2	11	8	Q8WD08		ctenophorus
46	2	18.2	11	8	079985		laudakia ca
47	2	18.2	11	8	Q8SKQ4		ctenophorus
48	2	18.2	11	8	Q9G359	-	japalura fl
49	2	18.2	11	8	Q8SKN6		ctenophorus
50	2	18.2	11	8	Q9G649		otocryptis
51	2	18.2	11	8	Q9G5X4		trapelus ag
52	2	18.2	11	8	Q94V74		lanthanotus
53	2	18.2	11	8	Q8SKP2		ctenophorus
54	2	18.2	11	8	Q8SKP5		ctenophorus
55	2	18.2	11	8	Q9G350		laudakia sa
56	2	18.2	11.	8	Q9G667		caimanops a
57	2	18.2	11	8	Q8WD17	Q8wd17	ctenophorus

58	2	18.2	11	8	Q9G670	09g670	rankinia ad
59	2	18.2	11	8	Q9G664	-	diporiphora
60	2	18.2	11	8	Q9G5Z8	- 3	acanthosaur
61	2	18.2	11	8	Q9G5W8		trapelus sa
62	2	18.2	11	8	Q9G371		pogona barb
63	2	18.2	11	8	Q9G353		trapelus sa
64	2	18.2	11	8	079642		laudakia mi
65	2	18.2	11	8	Q8SKN9	Q8skn9	ctenophorus
66	2	18.2	11	8	294VH7		varanus gil
67	2	18.2	11	8	Q9G619	Q9g619	ceratophora
68	2	18.2	11	8	Q9G2N4		chlamydosau
69	2	18.2	11	8	Q8WER7		ceratophora
70	2	18.2	11	8	Q8WD50	Q8wd50	ceratophora
71	2	18.2	11	8	Q8SKQ1	Q8skq1	ctenophorus
72	2	18.2	11	8	079639	079639	laudakia le
73	2	18.2	11	8	Q9G676	Q9g676	${\tt amphiboluru}$
74	2	18.2	11	8	Q35374	Q35374	paramecium
75	. 2	18.2	11	8	Q9G5 V 0	Q9g5v0	laudakia st
76	2	18.2	11	8	Q9G5X1	Q9g5x1	trapelus pe
77	2	18.2	11	8	Q8WD29		ctenophorus
78	2	18.2	11	8	Q8WD26	Q8wd26	ctenophorus
79	2	18.2	11	8	Q8WCZ9	· · · · · · · · · · · · · · · · · · ·	ctenophorus
80	2	18.2	11	8	Q9G658		hydrosaurus
81	2	18.2	11	8	Q8WD14		ctenophorus
82	2	18.2	11	8	Q8WER4		ceratophora
83	2	18.2	11	8	Q9G673		ctenophorus
84	2	18.2	11	8	079986		laudakia er
85	2	18.2	11	8	Q8WD02		ctenophorus
86	2	18.2	11	8	Q8SKN3		ctenophorus
87	2	18.2	11	8	Q8SKN0		ctenophorus
88	2	18.2	11	8	Q9G655		japalura tr
89	2	18.2	11	8	Q9G637		calotes lio
90	2	18.2	11	8	Q8WD23		ctenophorus
91	2	18.2	11	8	Q9G374		moloch horr
92	2	18.2	11	8	079918		physignathu
93	2	18.2	11	8	Q9G5V9		laudakia st
94	2	18.2	11	8	Q9G688		physignathu
95	2	18.2	11	8	Q7Y9L3		amphiboluru
96	2	18.2	11	8	Q7Y9K9		amphiboluru
97	2	18.2	11	8	Q7Y9K0	-	diporiphora
98	2	18.2	11	8	Q7Y9J1		diporiphora
99	2	18.2	11	8	Q7Y9I8		diporiphora
100	2	18.2	11	8	Q7Y9I5	ζ/ λ 912	diporiphora

ALIGNMENTS

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RESULT 1
Q47345
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                                                PRT;
                                                            11 AA.
ID
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АC
       Q47345;
      01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
DT
DT
       Leader peptide.
DE
       Escherichia coli.
OS
```

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OC
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
     Enterobacteriaceae; Escherichia.
     NCBI TaxID=562;
OX
RN
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RP
     SEQUENCE FROM N.A.
RC
     STRAIN=K12;
RA
     Faber F., van Giezen M., Van Gorcom R.F.M., Harder W.;
     "Identification of two Escherichia coli K12 proteins which are induced
RT
     in response to pollutant stress.";
RT
     Submitted (APR-1996) to the EMBL/GenBank/DDBJ databases.
RL
RN
     SEQUENCE OF 2-11 FROM N.A.
RP
RC
     STRAIN=K12;
RX
     MEDLINE=85134883; PubMed=6396419;
     Hudson G.S., Davidson B.E.;
RA
     "Nucleotide sequence and transcription of the phenylalanine and
RT
     tyrosine operons of Escherichia coli K12.";
RT
RL
     J. Mol. Biol. 180:1023-1051(1984).
DR
     EMBL; Z70523; CAA94435.1; -.
SQ
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              11 AA; 1402 MW;
                                  87AB199204141775 CRC64;
                          27.3%; Score 3; DB 2; Length 11;
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  Best Local Similarity
                          100.0%; Pred. No. 7.1e+03;
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                                                       Indels
                                                                  0; Gaps
                                                                              0;
  Matches
             3; Conservative
            8 PRR 10
Qу
              111
            5 PRR 7
Db
RESULT 2
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                                   PRT;
ID
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                 PRELIMINARY;
AC
     Q8SKP8;
     01-JUN-2002 (TrEMBLrel. 21, Created)
DT
     01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
GN
     Ctenophorus caudicinctus (Ring-tailed dragon).
OS
OG
     Mitochondrion.
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
OC
     Lepidosauria; Squamata; Iquania; Acrodonta; Agamidae; Amphibolurinae;
OC
     Ctenophorus.
OX
     NCBI TaxID=180905;
RN
     [1]
RΡ
     SEOUENCE FROM N.A.
     MEDLINE=21623804; PubMed=11754013;
RX
RA
     Melville J., Schulte J.A. II, Larson A.;
RT
     "A molecular phylogenetic study of ecological diversification in the
RT
     Australian lizard genus Ctenophorus.";
     J. Exp. Zool. 291:339-353(2001).
RL
     EMBL; AF375623; AAL78791.1; -.
DR
DR
     GO; GO:0005739; C:mitochondrion; IEA.
KW
     Mitochondrion.
FT
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                         11
                        1354 MW; A8F7371E33640336 CRC64;
SQ
     SEQUENCE
                11 AA;
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                                                  0; Indels
                                                                  0; Gaps
                                                                              0;
 Matches
            3; Conservative
            5 TMK 7
Qy
              | | | |
            3 TMK 5
Db
RESULT 3
Q9R790
     09R790
                 PRELIMINARY;
                                   PRT:
                                           11 AA.
ID
     09R790;
AC
     01-MAY-2000 (TrEMBLrel. 13, Created)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE
     Outer surface protein C (Fragment).
GN
     OSPC.
OS
     Borrelia garinii.
OC
     Bacteria; Spirochaetes; Spirochaetales; Spirochaetaceae; Borrelia.
    NCBI TaxID=29519;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
RC
     STRAIN=G25;
    MEDLINE=97426044; PubMed=9282748;
RX
     Tilly K., Casjens S., Stevenson B., Bono J.L., Samuels D.S., Hogan D.,
RA
RA
     "he Borrelia burgdorferi circular plasmid cp26: conservation of
RT
     plasmid structure and targeted inactivation of the ospC gene.";
RT
     Mol. Microbiol. 25:361-374(1997).
RL
     EMBL; U93700; AAC45535.1; -.
DR
     GO; GO:0009279; C:external outer membrane (sensu Gram-negativ. . .; IEA.
DR
     GO; GO:0003793; F:defense/immunity protein activity; IEA.
DR
     GO; GO:0006952; P:defense response; IEA.
DR
     InterPro; IPR001800; Lipoprotein 6.
DR
     Pfam; PF01441; Lipoprotein 6; 1.
DR
     NON TER
FT
                  11
                         11
     SEQUENCE
                11 AA; 1250 MW;
                                 0868D864C5B731A4 CRC64;
SQ
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
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             2; Conservative
                                0; Mismatches 0; Indels
                                                                  0; Gaps
            6 MK 7
Qу
              11
            1 MK 2
RESULT 4
O8RKN1
                 PRELIMINARY;
                                   PRT:
                                            11 AA.
ID
     Q8RKN1
AC
     Q8RKN1;
     01-JUN-2002 (TrEMBLrel. 21, Created)
DT
     01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT
     01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
DT
     Beta-lactamase CTX-M-9 (Fragment).
DE
```

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GN
     BLACTX-M-9.
OS
     Escherichia coli.
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
OC
     Enterobacteriaceae; Escherichia.
OX
     NCBI TaxID=562;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     STRAIN=743-D;
RC
     Sabate M., Navarro F., Miro E., Campoy S., Mirelis B., Barbe J.,
RA
RA
     Prats G.;
RT
     "A novel complex sull-type integron in Escherichia coli carrying the
     bla(CTX-M-9) gene.";
RT
RL
     Submitted (MAR-2002) to the EMBL/GenBank/DDBJ databases.
DR
     EMBL; AY092058; AAM15718.1; -.
     NON TER
FT
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                11 AA; 1071 MW; C26BF418D050440D CRC64;
     SEQUENCE
SO
  Query Match
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                          100.0%; Pred. No. 9.7e+04;
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                                                                              0;
 Matches
             2; Conservative 0; Mismatches
                                                                 0; Gaps
Qу
            1 AR 2
             -11
            4 AR 5
Db
RESULT 5
Q8L2T4
                                           11 AA.
ID ·
     Q8L2T4
                 PRELIMINARY;
                                   PRT;
AC
     Q8L2T4;
     01-OCT-2002 (TrEMBLrel. 22, Created)
DT
     01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT
     01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DT
     Histidinol phosphatase (Fragment).
     Neisseria meningitidis.
OS
OC
     Bacteria; Proteobacteria; Betaproteobacteria; Neisseriales;
OC
     Neisseriaceae; Neisseria.
     NCBI TaxID=487;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
RC
     STRAIN=126E;
     MEDLINE=22051050; PubMed=12055303;
RX
     Zhu P., Klutch M.J., Bash M.C., Tsang R.S.W., Ng L.K., Tsai C.M.;
RA
     "Genetic Diversity of Three Lgt Loci for Biosynthesis of
RT
     Lipooligosaccharide (LOS) in Neisseria Species.";
RT
     Microbiology 148:1833-1844(2002).
RL
DR
     EMBL; AF470685; AAM33538.1; -.
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FT
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                         11
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SQ
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  Best Local Similarity
                          100.0%; Pred. No. 9.7e+04;
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  Matches
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            6 MK 7
Qу
              1 MK 2
Db
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RESULT 6
Q9R7U8
ID
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                                            11 AA.
AC
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     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DE
     DNR protein (A regulatory protein for the expression of the NiR and
     nor genes) (Fragment).
DE
     Pseudomonas aeruginosa.
OS
OC
     Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
OC
     Pseudomonadaceae; Pseudomonas.
OX
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RN
     [1]
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RC
     STRAIN=PAO1;
RX
     MEDLINE=95226457; PubMed=7711073;
     Arai H., Igarashi Y., Kodama T.;
RA
RT
     "The structural genes for nitric oxide reductase from Pseudomonas
RT
     aeruqinosa.";
     Biochim. Biophys. Acta 1261:279-284(1995).
RL
RN
RP
     SEQUENCE FROM N.A.
     STRAIN=PAO1;
RC
     MEDLINE=95394152; PubMed=7664887;
RX
     Arai H., Igarashi Y., Kodama T.;
RA
     "Expression of the nir and nor genes for denitrification of
RT
     Pseudomonas aeruginosa requires a novel CRP/FNR-related
RT
     transcriptional regulator, DNR, in addition to ANR.";
RT
     FEBS Lett. 371:73-76(1995).
RL
     EMBL; D50019; BAA08746.1; -.
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SQ
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  Best Local Similarity
             2; Conservative
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                                                   0;
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                                                                   0; Gaps
                                                                               0;
  Matches
            9 RR 10
Qу
              -11
            7 RR 8
Db
RESULT 7
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                                    PRT:
                                            11 AA.
ΙD
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AC
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     01-MAY-2000 (TrEMBLrel. 13, Created)
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
     01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DT
     Cytochrome b6/f complex subunit IV (Fragment).
DE
GN
     PETD.
OS
     Prochlorococcus sp.
     Bacteria; Cyanobacteria; Prochlorophytes; Prochlorococcaceae;
OC
OC
     Prochlorococcus.
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OX
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RP
    Urbach E., Chisholm S.W.;
RA
    "Genetic diversity in Prochlorococcus populations flow cytometrically
RT
RT
    sorted from the Sargasso Sea and Gulf Stream.";
    Limnol. Oceanog. 43:1615-1630(1998).
RL
    EMBL; AF070132; AAD20740.1; -.
DR
    NON TER
                 11
FT
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                         18.2%; Score 2; DB 2; Length 11;
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 Best Local Similarity 100.0%; Pred. No. 9.7e+04;
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Qу
             Db
            6 KP 7
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P77404
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     01-FEB-1997 (TrEMBLrel. 02, Last sequence update)
     01-NOV-1998 (TrEMBLrel. 08, Last annotation update)
     DNA sequence downstream of the ECOPRRI HSD locus (Fragment).
DΕ
GN
    HSDR.
     Escherichia coli.
OS
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OC
     Enterobacteriaceae; Escherichia.
OC
OX
    NCBI TaxID=562;
RN
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RP
    MEDLINE=97206151; PubMed=9157244;
RX
     Tyndall C., Lehnherr H., Sandmeier U., Kulik E., Bickle T.A.;
RA
     "The type IC had loci of the enterobacteria are flanked by DNA with
RT
     high homology to the phage Pl genome: implications for the evolution
RT
     and spread of DNA restriction systems.";
RT
    Mol. Microbiol. 23:729-736(1997).
RL
     EMBL; X98145; CAA66840.1; -.
DR
     EMBL; X98144; CAA66839.1; -.
DR
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FT
                                  714AB092A4072734 CRC64;
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  Best Local Similarity
             2; Conservative 0; Mismatches 0; Indels
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                                                                 0; Gaps
  Matches
           10 RS 11
Qу
              | | |
            7 RS 8
Db
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RESULT 9 Q9RQ60

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PRELIMINARY;
                                           11 AA.
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AC
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DT
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
     Acetohydroxy acid synthase small subunit (Fragment).
DE
GN
     ILVH.
     Buchnera aphidicola.
OS
OC
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OC
     Enterobacteriaceae; Buchnera.
OX
     NCBI TaxID=9;
RN
     [1]
RP
     SEQUENCE FROM N.A.
RX
     MEDLINE=20022990; PubMed=10555290;
RA
     Clark M.A., Moran N.A., Baumann P.;
     "Sequence evolution in bacterial endosymbionts having extreme base
RT
RT
     compositions.";
RL
     Mol. Biol. Evol. 16:1586-1598(1999).
DR
     EMBL; AF129503; AAF13796.1; -.
FT
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                         11
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SQ
     SEQUENCE
                11 AA;
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
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                                                   0;
                                                      Indels
                                                                 0; Gaps
                                                                              0;
  Matches
            2; Conservative
            6 MK 7
Qу
              1 MK 2
Db
RESULT 10
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                                   PRT;
                                           11 AA.
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ID
AC
     093RM6;
     01-DEC-2001 (TrEMBLrel. 19, Created)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Lipophilic protein affecting bacterial lysis and methicillin
DE
DE
     resistance (Fragment).
     Staphylococcus aureus.
OS
     Bacteria; Firmicutes; Bacillales; Staphylococcus.
OC
OX
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RN
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RP
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     STRAIN=SRM551;
RC
     Maki H.;
RA
     "Upstream region of llm gene.";
RT
     Submitted (JAN-1997) to the EMBL/GenBank/DDBJ databases.
RL
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     NON TER
                  11
                         11
                11 AA; 1191 MW; 4AC763F4C2C72727 CRC64;
SQ
     SEQUENCE
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
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                                                                  0; Gaps
             2; Conservative
                              0; Mismatches
  Matches
```

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5 TM 6
Qу
              11
Db
           10 TM 11
RESULT 11
047600
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
ID
     Q47600
AC
     Q47600;
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
     REase protein (Fragment).
DΕ
     REASE.
GN
OS
     Escherichia coli.
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
     Enterobacteriaceae; Escherichia.
OC
OX
    NCBI TaxID=562;
RN
     [1]
RP
     SEQUENCE FROM N.A.
RX
     MEDLINE=91139577; PubMed=1995588;
RA
     Tao T., Bourne J.C., Blumenthal R.M.;
RT
     "A family of regulatory genes associated with type II restriction-
RT
     modification systems.";
RL
     J. Bacteriol. 173:1367-1375(1991).
     EMBL; M63619; AAA24556.1; -.
DR
     NON TER
                  11
FT
                         11
                11 AA; 1232 MW; 63175479572AB5A4 CRC64;
     SEQUENCE
SQ
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 9.7e+04;
            2; Conservative 0; Mismatches
                                                                  0; Gaps
                                                                               0;
                                                    0; Indels
  Matches
           10 RS 11
Qу
              4 RS 5
Db
RESULT 12
Q9K332
                                            11 AA.
                 PRELIMINARY;
                                    PRT:
ID
     Q9K332
AC
     01-OCT-2000 (TrEMBLrel. 15, Created)
DT
     01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT
     01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DT
DE
     Geh (Fragment).
GN
     GEH.
     Staphylococcus aureus.
OS
OC
     Bacteria; Firmicutes; Bacillales; Staphylococcus.
OX
     NCBI TaxID=1280;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     STRAIN=VARIOUS STRAINS;
RC
     MEDLINE=20187516; PubMed=10722640;
RX
     Cramton S.E., Schnell N.F., Gotz F., Bruckner R.;
RA
     "Identification of a new repetitive element in Staphylococcus
RT
RT
     aureus.";
```

```
Infect. Immun. 68:2344-2348(2000).
RL
     EMBL; AF195967; AAF60251.1; -.
DR
     EMBL; AF195963; AAF60243.1; -.
DR
     EMBL; AF195964; AAF60245.1; -.
DR
     EMBL; AF195965; AAF60247.1; -.
DR
     EMBL; AF195966; AAF60249.1; -.
DR
     NON TER
FT
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                          1
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                11 AA; 1262 MW; 4F978F86AAB1A723 CRC64;
SQ
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
  Best Local Similarity 100.0%; Pred. No. 9.7e+04;
             2; Conservative
                                0; Mismatches
                                                                              0;
 Matches
                                                   0; Indels
                                                                  0; Gaps
            4 KT 5
Qу
              11
            1 KT 2
Db
RESULT 13
Q44090
ID
     Q44090
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
AC
     044090;
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Hypothetical export segment (Fragment).
     Acholeplasma laidlawii.
os
     Bacteria; Firmicutes; Mollicutes; Acholeplasmatales;
OC
     Acholeplasmataceae; Acholeplasma.
OC
OX
     NCBI TaxID=2148;
RN
     [1]
RP
     SEQUENCE FROM N.A.
RC
     STRAIN=A-EF22;
     Boyer M.J., Jarhede T.K., Tegman V., Wieslander A.;
RA
     "Sequence regions from Acholeplasma laidlawii which restore export of
     beta-lactamase in Escherichia coli.";
RT
     Submitted (JUN-1993) to the EMBL/GenBank/DDBJ databases.
RL
     EMBL; Z22875; CAA80495.1; -.
DR
     PIR; S33519; S33519.
DR
     NON TER
FT
                  11
                         11
     SEQUENCE
                11 AA; 1234 MW;
                                  5C9D2AE8A682C337 CRC64;
SO
  Ouery Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
                              0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
  Matches
             2; Conservative
            6 MK 7
Qy
              11
Db
            1 MK 2
RESULT 14
Q56413
                                           11 AA.
ID
     Q56413
                 PRELIMINARY;
                                   PRT;
AC
     Q56413;
DT
     01-NOV-1996 (TrEMBLrel. 01, Created)
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT
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```
DT
    01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
    IS602L region DNA, 5' end (Fragment).
DE
    Escherichia coli.
OS
    Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
OC
    Enterobacteriaceae; Escherichia.
OX
    NCBI TaxID=562;
RN
    [1]
    SEQUENCE FROM N.A.
RP
RC
    TRANSPOSON=Transposon Tn602;
RX
    MEDLINE=87318208; PubMed=2819910;
RA
    Stibitz S., Davies J.E.;
    "Tn602: A naturally occurring relative of Tn903 with direct repeats.";
RT
RL
    Plasmid 17:202-209(1987).
DR
    EMBL; M22735; AAA27464.1; -.
FT
    NON TER
                  1
                          1
    NON TER
                  11
                         11
FT
    SEQUENCE 11 AA; 1361 MW; 447E8354A05339C3 CRC64;
SO
                          18.2%; Score 2; DB 2; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 9.7e+04;
 Matches
            2; Conservative
                               0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
            3 QK 4
Qу
             Db
            3 QK 4
RESULT 15
Q9R872
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
ID
    Q9R872
AC
    Q9R872;
     01-MAY-2000 (TrEMBLrel. 13, Created)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
    Dihydrofolate reductase (Fragment).
DE
    DFR1.
GN
    Escherichia coli.
OS
OG
    Plasmid r483.
    Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
OC
    Enterobacteriaceae; Escherichia.
OX
    NCBI TaxID=562;
RN
    [1]
RP
    SEQUENCE FROM N.A.
RC
    TRANSPOSON=Tn7;
    Hansson K., Sundstrom L., Pelletier A., Roy P.H.;
RA
     "Sequence and function of the second type of integron in Tn7.";
RT
     Submitted (SEP-1997) to the EMBL/GenBank/DDBJ databases.
RL
RN
     [2]
RP
    SEQUENCE FROM N.A.
RC
    TRANSPOSON=Tn7;
RX
    MEDLINE=82220022; PubMed=6283361;
    Lichtenstein C., Brenner S.;
RA
     "Unique insertion site of Tn7 in the E. coli chromosome.";
RT
RL
    Nature 297:601-603(1982).
RN
    [3]
RP
     SEQUENCE FROM N.A.
RC
     TRANSPOSON=Tn7;
```

```
RX
     MEDLINE=83290694; PubMed=6411680;
RA
     Simonsen C.C., Chen E.Y., Levinson A.D.;
     "Identification of the type I trimethoprim-resistant dihydrofolate
RT
     reductase specified by the Escherichia coli R-plasmid R483: Comparison
RT
     with procaryotic and eucaryotic dihydrofolate reductases.";
RT
RL
     J. Bacteriol. 155:1001-1008(1983).
RN
     [4]
     SEQUENCE FROM N.A.
RP
     TRANSPOSON=Tn7;
RC
RX
     MEDLINE=83272957; PubMed=6308574;
     Fling M.E., Richards C.;
RA
     "The nucleotide sequence of the trimethoprim-resistant dihydrofolate
RT
RT
     reductase gene harbored by Tn7.";
RL
     Nucleic Acids Res. 11:5147-5158(1983).
     EMBL; AJ001816; CAA05032.1; -.
DR
     GO; GO:0046821; C:extrachromosomal DNA; IEA.
DR
KW
     Plasmid.
FT
     NON TER
                  11
                         11
SQ
     SEQUENCE
                11 AA; 1221 MW; 92014864C2C69735 CRC64;
  Query Match
                          18.2%; Score 2; DB 2; Length 11;
                          100.0%; Pred. No. 9.7e+04;
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            2; Conservative
  Matches
                                 0; Mismatches
                                                    0;
                                                       Indels
                                                                   0; Gaps
                                                                               0;
Qу
            6 MK 7
              \mathbf{I}
            1 MK 2
Db
RESULT 16
Q9R446
                                    PRT;
                                            11 AA.
                 PRELIMINARY;
ID
     Q9R446
AC
     Q9R446;
     01-MAY-2000 (TrEMBLrel. 13, Created)
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT
     01-MAY-2000 (TrEMBLrel. 13, Last annotation update)
DT
     Carbamoyl-phosphate synthase subunit A (Fragment).
DE
GN
     CARA.
OS
     Neisseria gonorrhoeae.
     Bacteria; Proteobacteria; Betaproteobacteria; Neisseriales;
OC
     Neisseriaceae; Neisseria.
OC
OX
     NCBI TaxID=485;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     STRAIN=MS11, and FA1090;
RC
     MEDLINE=95291461; PubMed=7773412;
RX
     Lawson F.S., Billowes F.M., Dillon J.A.;
RA
     "Organization of carbamoyl-phosphate synthase genes in Neisseria
RT
     gonorrhoeae includes a large, variable intergenic sequence which is
RT
RT
     also present in other Neisseria species.";
RL
     Microbiology 141:0-0(0).
RN
     [2]
     SEQUENCE FROM N.A.
RP
RC
     STRAIN=MS11, and FA1090;
     Brinkman F.S.L., Francis F.M., Dillon J.R.;
RA
     "Complexity of the variable sequence between the carbamoyl-phosphate
RT
     synthase genes of Neisseria species.";
RT
```

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EMBL; AF029363; AAC78453.1; -.
DR
     EMBL; AF029362; AAC78452.1; -.
DR
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FT
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               11 AA; 1178 MW; 0C07A8E3DDD33694 CRC64;
     SEQUENCE
SQ
                          18.2%; Score 2; DB 2; Length 11;
  Query Match
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
                                                                               0;
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                   0;
                                                                       Gaps
 Matches
            6 MK 7
Qy
              \mathbf{I}
            5 MK 6
Db
RESULT 17
Q7X566
                 PRELIMINARY;
                                    PRT:
                                            11 AA.
     Q7X566
ID
AC
     Q7X566;
     01-OCT-2003 (TrEMBLrel. 25, Created)
DT
DT
     01-OCT-2003 (TrEMBLrel. 25, Last sequence update)
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT ·
     Hypothetical protein (Fragment).
DE
     Thermus thermophilus.
OS
     Bacteria; Deinococcus-Thermus; Deinococci; Thermales; Thermaceae;
OC
OC
     Thermus.
     NCBI TaxID=274;
ΟX
RN
     [1]
RP
     SEQUENCE FROM N.A.
     Miyazaki T., Miyazaki J., Nishiyama M., Yamane H.;
RA
     "Characterization of a LysN, the 4th enzyme in lysine biosynthesis, in
RT
     an extremely thermophilic bacterium, Thermus thermophilus HB27.";
RT
     Submitted (NOV-2002) to the EMBL/GenBank/DDBJ databases.
RL
     EMBL; AB097117; BAC76940.1; -.
DR
     Hypothetical protein.
KW
     NON TER
FT
                  11
                          11
                11 AA; 1073 MW; 39792C1E75B72EB8 CRC64;
     SEQUENCE
SO
                           18.2%; Score 2; DB 2; Length 11;
  Query Match
                           100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
                                                                   0; Gaps
                                                                               0;
                                  0; Mismatches
                                                    0; Indels
             2; Conservative
  Matches
            7 KP 8
Qу
              \mathbf{I}
             9 KP 10
Db
RESULT 18
Q9HFN8
                 PRELIMINARY;
                                    PRT;
                                            11 AA.
ID
     Q9HFN8
AC
     Q9HFN8;
     01-MAR-2001 (TrEMBLrel. 16, Created)
DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-OCT-2002 (TrEMBLrel. 22, Last annotation update)
DΤ
     Acyl carrier protein (Fragment).
DE
GN
     Candida rugosa (Yeast) (Candida cylindracea).
OS
```

Submitted (OCT-1997) to the EMBL/GenBank/DDBJ databases.

RL

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Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC
     Saccharomycetales; mitosporic Saccharomycetales; Candida.
OC
     NCBI TaxID=5481;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
RA
     Biasio W.;
     Thesis (2000), University of Vienna, Austria.
RL
     EMBL; AJ279021; CAC08812.1; -.
DR
FT
                  1
                          1
SO
     SEQUENCE
                11 AA; 1274 MW; D2E4CC3976C40732 CRC64;
  Query Match
                          18.2%; Score 2; DB 3; Length 11;
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
  Matches
             2; Conservative
                                 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
            2 RQ 3
Qy
              11
Db
            6 RO 7
RESULT 19
09Y3G2
                 PRELIMINARY;
ID
     Q9Y3G2
                                   PRT:
                                           11 AA.
AC
     Q9Y3G2;
     01-NOV-1999 (TrEMBLrel. 12, Created)
DT
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     LSFR2 protein (Fragment).
DΕ
     LSFR2.
GN
os
     Homo sapiens (Human).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
     NCBI TaxID=9606;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=99299247; PubMed=10369878;
RX
     Gilley J., Fried M.;
RA
     "Extensive gene order differences within regions of conserved synteny
RT
     between the Fugu and human genomes: implications for chromosomal
RT
     volution and the cloning of disease genes.";
RT
     Hum. Mol. Genet. 8:1313-1320(1999).
RL
     EMBL; Y17456; CAB44349.1; -.
DR
FT
     NON TER
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                          1
     NON TER
FT
                  11
                         11
                11 AA; 1342 MW;
     SEQUENCE
                                  68C5E5D7A8772324 CRC64;
SO
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  Query Match
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
                               0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
  Matches
             2; Conservative
Qу
            2 RO 3
              II
            2 RQ 3
Db
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RESULT 20 Q9H4H5

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PRELIMINARY;
ID
     Q9H4H5
                                   PRT;
                                           11 AA.
AC
     Q9H4H5;
     01-MAR-2001 (TrEMBLrel. 16, Created)
DT
     01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DT
     01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DT
DE
     DJ661I20.2 (Novel helicase C-terminal domain and SNF2 N-terminal
DE
     domains containing protein) (Fragment).
     DJ620E11.1.
GN
OS
     Homo sapiens (Human).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
     NCBI TaxID=9606;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
     Skuce C.;
RA
     Submitted (JUN-2001) to the EMBL/GenBank/DDBJ databases.
RL
DR
     EMBL; AL031669; CAC17164.2; -.
FT
     NON TER
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                          1
FT
     NON TER
                  11
                         11
SQ
     SEQUENCE
                11 AA;
                        1420 MW; 5EB2C32A3326D053 CRC64;
  Query Match
                          18.2%; Score 2; DB 4; Length 11;
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
                                 0; Mismatches
  Matches
             2; Conservative
                                                  0; Indels
                                                                  0;
                                                                               0;
                                                                      Gaps
            6 MK 7
Qy
              \Pi
            1 MK 2
Dh
RESULT 21
015997
                                   PRT:
                                            11 AA.
ΙD
     Q15997
                 PRELIMINARY;
AC
     015997;
     01-NOV-1996 (TrEMBLrel. 01, Created)
     01-NOV-1996 (TrEMBLrel: 01, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
DE
     RARA protein (Fragment).
GN
     RARA.
OS
     Homo sapiens (Human).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX
     NCBI TaxID=9606;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=93222087; PubMed=7682097;
RX
     Dong S., Geng J.P., Tong J.H., Wu Y., Cai J.R., Sun G.L., Chen S.R.,
RA
     Wang Z.Y., Larsen C.J., Berger R., et al;
RA
     "Breakpoint clusters of the PML gene in acute promyelocytic leukemia:
RT
     primary structure of the reciprocal products of the PML-RARA gene in a
RT
RT
     patient with t(15;17).";
     Genes Chromosomes Cancer 6:133-139(1993).
RL
     EMBL; S57794; AAD13888.1; -.
DR
DR
     PIR; I54081; I54081.
     NON TER
FT
                   1
     SEQUENCE
                11 AA; 1277 MW; 33C70E22CDDDC417 CRC64;
SQ
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18.2%; Score 2; DB 4; Length 11;
  Query Match
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
                                                                               0;
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
            8 PR 9
Qу
              \Pi
            4 PR 5
Db
RESULT 22
O9UCP5
                                   PRT;
ID
     Q9UCP5
                 PRELIMINARY;
                                            11 AA.
AC
     Q9UCP5;
DT
     01-MAY-2000 (TrEMBLrel. 13, Created)
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
DΕ
     Aggrecan core protein (Fragment).
OS
     Homo sapiens (Human).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
OX
     NCBI TaxID=9606;
RN
     [1]
RP
     SEQUENCE.
     MEDLINE=92235266; PubMed=1569188;
RX
     Sandy J.D., Flannery C.R., Neame P.J., Lohmander L.S.;
RA
     J. Clin. Invest. 89:1512-1516(1992).
RL
     GO; GO:0005201; F:extracellular matrix structural constituent; TAS.
DR
     GO; GO:0006508; P:proteolysis and peptidolysis; NAS.
DR
     GO; GO:0001501; P:skeletal development; NAS.
DR
     NON TER
FT
                   1
                          1
     NON TER
                  11
                         11
FT
                                  8FBFE8DFE72042D5 CRC64;
     SEQUENCE
                11 AA; 1149 MW;
SO
                          18.2%; Score 2; DB 4; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 9.7e+04;
            2; Conservative 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                               0;
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            1 AR 2
Qv
              \mathbf{I}
            1 AR 2
Db
RESULT 23
026092
                 PRELIMINARY:
                                    PRT;
                                            11 AA.
ID
     026092
AC
     Q26092;
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Sea StAR histone H2B gene 5'region (Fragment).
DE
OS
     Pisaster ochraceus (Sea star).
     Eukaryota; Metazoa; Echinodermata; Eleutherozoa; Asterozoa;
OC
OC
     Asteroidea; Forcipulatacea; Forcipulatida; Asteriidae; Pisaster.
OX
     NCBI TaxID=7612;
RN
     [1]
     SEQUENCE FROM N.A.
RP
     TISSUE=Sperm;
RC
```

```
RA
     Howell A.M., Cool D., Hewitt J., Ydenberg B., Smith M.J., Honda B.M.;
RT
     "Organization and Unusual Expression of Histone Genes in the Sea Star
     Pisaster ochraceus.";
RT
     J. Mol. Evol. 25:29-36(1987).
RL
DR
     EMBL; X05619; CAA29106.1; -.
FΤ
     NON TER
                  11
                         11
     SEQUENCE
                11 AA; 1128 MW; 5173974A3865BDD3 CRC64;
SQ
  Query Match
                          18.2%;
                                  Score 2; DB 5; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 9.7e+04;
  Matches
             2; Conservative
                              0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
                                                                              0;
            3 OK 4
Qу
              10 QK 11
Db
RESULT 24
Q25916
ID
     Q25916
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
AC
     025916;
DT
     01-NOV-1996 (TrEMBLrel. 01, Created)
DT
     01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
DE
     Malaria antigen (7H8/2) (Fragment).
     Plasmodium falciparum.
OS
OC
     Eukaryota; Alveolata; Apicomplexa; Haemosporida; Plasmodium.
     NCBI TaxID=5833;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=91164876; PubMed=1706114;
RX
     Limpaiboon T., Taylor D., Jones G., Geysen H.M., Saul A.;
RA
     "Characterization of a Plasmodium falciparum epitope recognized by a
RT
RT
     monoclonal antibody with broad isolate and species specificity.";
     Southeast Asian J. Trop. Med. Public Health 21:388-396(1990).
RL
     EMBL; M31305; AAA29645.1; -.
DR
     NON TER
FT
                   7
                          1
     SEQUENCE
                11 AA; 1415 MW; DB03D3BC42C33699 CRC64;
SQ
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 9.7e+04;
          2; Conservative 0; Mismatches
                                                   0; Indels
                                                                 0; Gaps
                                                                              0;
  Matches
            6 MK 7
Qу
              11
            5 MK 6
Db
RESULT 25
Q9NFX0
ID
     Q9NFX0
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
AC
     Q9NFX0;
     01-OCT-2000 (TrEMBLrel. 15, Created)
DT
     01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT
     01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
DT
     Mitochondrial aconitase (Fragment).
DE
     ACON OR MAC OR CG9244.
GN
```

```
OS
     Drosophila melanogaster (Fruit fly).
OC
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
OC
     Ephydroidea; Drosophilidae; Drosophila.
OX
     NCBI TaxID=7227;
RN
     [1]
     SEQUENCE FROM N.A.
RP
     STRAIN=CANTON S;
RC
RA
     Lind M.I.;
     "Charaterisation of two iron regulatory proteins and mitochondrial
RT
     aconitase in Drosophila melanogaster.";
RT
     Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
RL
     EMBL; AJ252019; CAB93522.1; -.
DR
     FlyBase; FBgn0010100; Acon.
DR
     NON TER
FT
                  11
                         11
     SEQUENCE
                11 AA; 1204 MW; 7C889CE4D4469734 CRC64;
SQ
  Query Match
                          18.2%; Score 2; DB 5; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 9.7e+04;
 Matches
             2; Conservative
                                0; Mismatches 0; Indels
                                                                  0; Gaps
                                                                              0;
Qу
            1 AR 2
             Db
            3 AR 4
RESULT 26
Q8MPQ3
ID
     Q8MPQ3
                 PRELIMINARY;
                                   PRT;
                                            11 AA.
     Q8MPQ3;
AC
     01-OCT-2002 (TrEMBLrel. 22, Created)
DT
     01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
DT
     01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
DT
     Hypothetical protein Y23H5A.8b.
DΕ
GN
     Y23H5A.8.
OS
     Caenorhabditis elegans.
     Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
OC
OC
     Rhabditidae; Peloderinae; Caenorhabditis.
OX
     NCBI TaxID=6239;
RN
     [1]
     SEQUENCE FROM N.A.
RP
RC
     STRAIN=Bristol N2;
     MEDLINE=99069613; PubMed=9851916;
RX
RA
     Waterston R.;
     "Genome sequence of the nematode C. elegans: a platform for
RT
     investigating biology. The C. elegans Sequencing Consortium.";
RT
     Science 282:2012-2018(1998).
RL
RN
     [2]
RP
     SEQUENCE FROM N.A.
RC
     STRAIN=Bristol N2;
RA
     Dempsey S., Le T.T.;
     "The sequence of C. elegans cosmid Y23H5A.";
RT
     Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.
RL
RN
RP
     SEQUENCE FROM N.A.
RC
     STRAIN=Bristol N2;
RA
     Waterston R.;
```

```
EMBL; AF077541; AAM54173.1; -.
     WormPep; Y23H5A.8b; CE31097.
DR
     Hypothetical protein.
KW
              11 AA; 1319 MW; 6920D63A21B77414 CRC64;
SQ
     SEQUENCE
  Query Match
                          18.2%; Score 2; DB 5; Length 11;
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
                               0; Mismatches
                                                                              0;
            2; Conservative
                                                   0; Indels
                                                                 0;
                                                                     Gaps
            9 RR 10
Qу
              4 RR 5
RESULT 27
P82699
ID
     P82699
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
AC
     P82699;
DT
     01-MAR-2001 (TrEMBLrel. 16, Created)
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Periviscerokinin-2 (LEM-PVK-2).
DE
     Leucophaea maderae (Madeira cockroach),
os
     Nauphoeta cinerea (Cinereous cockroach) (Gray cockroach),
OS
     Blaberus craniifer,
OS
OS
     Blaptica dubia, and
     Gromphadorina portentosa (Cockroach).
os
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blaberoidea;
OC
     Blaberidae; Leucophaea.
OC
     NCBI TaxID=6988, 6990, 6982, 132935, 36953;
OX
RN
     [1]
     SEQUENCE, FUNCTION, AND MASS SPECTROSCOPY.
RP
     TISSUE-ABDOMINAL PERISYMPATHETIC ORGANS;
RC
     MEDLINE=20307624; PubMed=10849006;
RX
     Predel R., Kellner R., Baggerman G., Steinmetzer T., Schoofs L.;
RA
     "Identification of novel periviscerokinins from single neurohaemal
RT
     release sites in insects. MS/MS fragmentation complemented by Edman
RT
RT
     degradation.";
     Eur. J. Biochem. 267:3869-3873(2000).
RL
     -!- FUNCTION: MEDIATES VISCERAL MUSCLE CONTRACTILE ACTIVITY
CC
CC
         (MYOTROPIC ACTIVITY).
     -!- MASS SPECTROMETRY: MW=1102.6; METHOD=MALDI.
CC
     GO; GO:0007218; P:neuropeptide signaling pathway; IEA.
DR
KW
     Neuropeptide; Amidation.
FT
     MOD RES
                                  AMIDATION.
     SEQUENCE
                11 AA; 1103 MW;
                                  2F4D9FFD85B05728 CRC64;
SQ
  Query Match
                          18.2%; Score 2; DB 5; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 9.7e+04;
                                                                              0;
             2; Conservative
                                0; Mismatches
                                                   0; Indels
                                                                      Gaps
  Matches
            8 PR 9
Qу
              9 PR 10
Db
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Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases.

RL

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RESULT 28
P82700
                 PRELIMINARY;
                                    PRT:
                                            11 AA.
ID
     P82700
AC
     P82700;
DT
     01-MAR-2001 (TrEMBLrel. 16, Created)
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
DE
     Periviscerokinin-3 (LEM-PVK-3).
ÓS
     Leucophaea maderae (Madeira cockroach),
     Nauphoeta cinerea (Cinereous cockroach) (Gray cockroach),
OS
     Blaberus craniifer,
OS
     Blaptica dubia (Argentinian wood cockroach), and
OS
OS
     Gromphadorina portentosa (Cockroach).
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blaberoidea;
OC
OC
     Blaberidae; Leucophaea.
     NCBI TaxID=6988, 6990, 6982, 132935, 36953;
OX
RN
     SEQUENCE, FUNCTION, AND MASS SPECTROSCOPY.
RP
     TISSUE=ABDOMINAL PERISYMPATHETIC ORGANS;
RC
RX
     MEDLINE=20307624; PubMed=10849006;
     Predel R., Kellner R., Baggerman G., Steinmetzer T., Schoofs L.;
RA
     "Identification of novel periviscerokinins from single neurohaemal
RT
     release sites in insects. MS/MS fragmentation complemented by Edman
RT
RT
     degradation.";
     Eur. J. Biochem. 267:3869-3873(2000).
RL
     -!- FUNCTION: MEDIATES VISCERAL MUSCLE CONTRACTILE ACTIVITY
CC
         (MYOTROPIC ACTIVITY).
CC
     -!- MASS SPECTROMETRY: MW=1146.6; METHOD=MALDI.
CC
     GO; GO:0007218; P:neuropeptide signaling pathway; IEA.
DR
KW
     Neuropeptide; Amidation.
                  11
     MOD RES
                                  AMIDATION.
FT
                         11
                                  2F4D9FF2D7605698 CRC64;
     SEQUENCE
                11 AA; 1147 MW;
SQ
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
                                                                               0:
                                 0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
             2; Conservative
  Matches
            8 PR 9
Qу
              11
            9 PR 10
Db
RESULT 29
Q95PX6
     Q95PX6
                 PRELIMINARY;
                                    PRT;
                                            11 AA.
ID
AC
     Q95PX6;
     01-DEC-2001 (TrEMBLrel. 19, Created)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
DT
DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DE
     Hypothetical protein.
GN
     ZK1236.8.
OS
     Caenorhabditis elegans.
     Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida; Rhabditoidea;
OC
     Rhabditidae; Peloderinae; Caenorhabditis.
OC
     NCBI TaxID=6239;
OX
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RN
     [1]
RP
     SEQUENCE FROM N.A.
RC
     STRAIN=Bristol N2;
     MEDLINE=99069613; PubMed=9851916;
RX
RA
     None;
     "Genome sequence of the nematode C. elegans: a platform for
RT
     investigating biology. The C. elegans Sequencing Consortium.";
RT
     Science 282:2012-2018(1998).
RL
RN
     SEQUENCE FROM N.A.
RP
     STRAIN=Bristol N2;
RC
RA
     Favello A.;
     "The sequence of C. elegans cosmid ZK1236.";
RT
     Submitted (MAY-1993) to the EMBL/GenBank/DDBJ databases.
RL
RN
RP
     SEQUENCE FROM N.A.
     STRAIN=Bristol N2;
RC
     Waterston R.;
RA
     "Direct Submission.";
RT
RL
     Submitted (OCT-2001) to the EMBL/GenBank/DDBJ databases.
DR
     EMBL; L13200; AAL11108.1; -.
DR
     WormPep; ZK1236.8; CE29629.
     Hypothetical protein.
KW
              11 AA; 1304 MW; DFA3510A25A76322 CRC64;
SQ
     SEQUENCE
                          18.2%; Score 2; DB 5; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 9.7e+04;
                                                 0; Indels
                                                                  0;
                                                                      Gaps
                                                                              0;
                              0; Mismatches
  Matches
             2; Conservative
            7 KP 8
Qу
             11
            5 KP 6
Db
RESULT 30
Q9XSP7
                                           11 AA.
                 PRELIMINARY;
                                   PRT;
ID
     Q9XSP7
AC
     O9XSP7:
     01-NOV-1999 (TrEMBLrel. 12, Created)
DT
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Platelet-derived growth factor A chain (Fragment).
DE
GN
     Pygathrix nemaeus (Dove langur).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae; Colobinae;
OC
OC
     Pygathrix.
     NCBI TaxID=54133;
OX
RN
     SEQUENCE FROM N.A.
RP
     MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
     Hum. Genet. 105:452-459(1999).
RL
     EMBL; AJ243282; CAB45924.1; -.
DR
     NON TER
                  1
                          1
FT
                  11
                         11
FT
     NON TER
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SQ
     SEQUENCE 11 AA; 1345 MW; 7FB881F101E1E044 CRC64;
 Query Match
                          18.2%; Score 2; DB 6; Length 11;
 Best Local Similarity
                         100.0%; Pred. No. 9.7e+04;
            2; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
          10 RS 11
Qy
             8 RS 9
Db
RESULT 31
Q9XSP2
                PRELIMINARY:
                                   PRT:
                                           11 AA.
ID
    Q9XSP2
AC
     Q9XSP2;
     01-NOV-1999 (TrEMBLrel. 12, Created)
DT
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
DE
     Platelet-derived growth factor A chain (Fragment).
GN
    PDGFA.
OS
    Hylobates syndactylus (Siamang) (Symphalangus syndactylus).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Mammalia; Eutheria; Primates; Catarrhini; Hylobatidae; Hylobates.
OX
    NCBI TaxID=9590;
RN
     [1]
     SEQUENCE FROM N.A.
RP
    MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
    Hum. Genet. 105:452-459(1999).
RL
    EMBL; AJ243280; CAB45927.1; -.
DR
    NON TER
                         1
FT
                  1
    NON TER
                 11
                         11
FT
     SEQUENCE 11 AA; 1345 MW; 7FB881F101E1E044 CRC64;
SQ
                          18.2%; Score 2; DB 6; Length 11;
 Query Match
                         100.0%; Pred. No. 9.7e+04;
 Best Local Similarity
 Matches
            2; Conservative 0; Mismatches
                                                 0; Indels
                                                                 0; Gaps
                                                                             0;
          10 RS 11
Qy
             11
           8 RS 9
Db
RESULT 32
Q9XSP5
ID
     Q9XSP5
                PRELIMINARY;
                                   PRT:
                                           11 AA.
AC
     Q9XSP5;
     01-NOV-1999 (TrEMBLrel. 12, Created)
DT
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
     Platelet-derived growth factor A chain (Fragment).
DE
     PDGFA.
GN
OS
     Pan troglodytes (Chimpanzee).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.
OC
OX
     NCBI TaxID=9598;
```

```
RN
     [1]
RP
     SEQUENCE FROM N.A.
RX
     MEDLINE=20065871; PubMed=10598812;
     Bonthron D.T., Smith S.L., Campbell R.;
RA
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
     Hum. Genet. 105:452-459(1999).
RL
     EMBL; AJ243277; CAB45926.1; -.
DR
     NON TER
FT
                  1
                          1
     NON TER
                  11
                         11
FT
     SEQUENCE
                11 AA; 1331 MW; 7FB881F101E1F2D4 CRC64;
SO
  Query Match
                          18.2%; Score 2; DB 6; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 9.7e+04;
             2; Conservative
                                 0; Mismatches
                                                                              0;
  Matches
                                                    0; Indels
                                                                  0; Gaps
           10 RS 11
Qу
              \mathbf{I}
Db
            8 RS 9
RESULT 33
Q9XSP8
ID
     Q9XSP8
                 PRELIMINARY;
                                   PRT;
                                            11 AA.
AC
     Q9XSP8;
DT
     01-NOV-1999 (TrEMBLrel. 12, Created)
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Platelet-derived growth factor A chain (Fragment).
DE
GN
     PDGFA.
OS
     Presbytis johnii.
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae; Colobinae;
OC
OC
     Presbytis.
     NCBI TaxID=98375;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA
RT
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
     Hum. Genet. 105:452-459(1999).
RL
     EMBL; AJ243281; CAB46013.1; -.
DR
FT
     NON TER
                   1
                          1
     NON TER
FΤ
                  11
                         11
SO
     SEQUENCE
                11 AA; 1345 MW; 7FB881F101E1E044 CRC64;
  Query Match
                          18.2%; Score 2; DB 6; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 9.7e+04;
                                 0; Mismatches
                                                                  0; Gaps
             2; Conservative
                                                                              0;
                                                    0; Indels
        10 RS 11
Qу
              11
            8 RS 9
Db
RESULT 34
Q9XSP6
ΙD
                 PRELIMINARY;
                                   PRT;
                                            11 AA.
     Q9XSP6
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AC
     09XSP6;
DT
     01-NOV-1999 (TrEMBLrel. 12, Created)
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Platelet-derived growth factor A chain (Fragment).
DE
     PDGFA.
GN
     Pongo pygmaeus (Orangutan).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pongo.
OC
     NCBI TaxID=9600;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
RL
     Hum. Genet. 105:452-459(1999).
     EMBL; AJ243279; CAB45925.1; -.
DR
FT
     NON TER
                   1
                          1
FT
     NON TER
                         11
                  11
SQ
     SEQUENCE
                11 AA;
                        1345 MW; 7FB881F101E1E044 CRC64;
  Query Match
                          18.2%; Score 2; DB 6; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 9.7e+04;
  Matches
             2; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
           10 RS 11
Qу
              11
            8 RS 9
Db
RESULT 35
Q9XSQ4
                 PRELIMINARY;
                                            11 AA.
ID
     Q9XSQ4
                                   PRT;
AC
     09XSQ4;
     01-NOV-1999 (TrEMBLrel. 12, Created)
DT
     01-NOV-1999 (TrEMBLrel. 12, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     Platelet-derived growth factor A chain (Fragment).
DE
GN
     PDGFA.
     Gorilla gorilla (gorilla).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Gorilla.
OX
     NCBI TaxID=9593;
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=20065871; PubMed=10598812;
RX
     Bonthron D.T., Smith S.L., Campbell R.;
RA
     "Complex patterns of intragenic polymorphism at the PDGFA locus.";
RT
     Hum. Genet. 105:452-459(1999).
RL
     EMBL; AJ243278; CAB45916.1; -.
DR
FT
     NON TER
                          1
                   1
     NON TER
FT
                  11
                         11
     SEQUENCE
                11 AA; 1331 MW; 7FB881F101E1F2D4 CRC64;
SQ
                          18.2%; Score 2; DB 6; Length 11;
  Query Match
                          100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
                                 0; Mismatches
                                                                  0; Gaps
                                                                              0;
             2; Conservative
                                                    0;
                                                       Indels
```

```
10 RS 11
Qу
              \perp
            8 RS 9
Dh
RESULT 36
077872
                                            11 AA.
ID
     077872
                 PRELIMINARY;
                                    PRT;
AC
     077872;
     01-NOV-1998 (TrEMBLrel. 08, Created)
DT
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     MHC class II B locus 1 (Fragment).
DE
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
os
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
OC
     Cichlidae; Oreochromis.
OX
     NCBI TaxID=8128;
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=98315113; PubMed=9649539;
RX
RA
     Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
     Figueroa F., Sultmann H., Klein J.;
RA
     "Linkage relationships and haplotype polymorphism among cichlid mhc
RT
RT
     class II B loci.";
     Genetics 149:1527-1537(1998).
RL
     EMBL; AF049981; AAC41320.1; -.
DR
     NON TER
FT
                   1
                           1
FT
     NON TER
                  11
                          11
     SEQUENCE
                11 AA; 1133 MW;
                                   283248EC3EB72728 CRC64;
SQ
                           18.2%; Score 2; DB 7; Length 11;
  Query Match
                           100.0%; Pred. No. 9.7e+04;
  Best Local Similarity
                                 0; Mismatches
                                                    0; Indels
                                                                   0; Gaps
                                                                               0;
  Matches
             2; Conservative
            7 KP 8
Qγ
              | \cdot |
            8 KP 9
Db
RESULT 37
077873
                 PRELIMINARY;
                                    PRT;
                                            11 AA.
ID
     077873
AC
     077873;
     01-NOV-1998 (TrEMBLrel. 08, Created)
DT
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
DT
     MHC class II B locus 1 (Fragment).
DΕ
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
OS
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
     Cichlidae; Oreochromis.
OX
     NCBI TaxID=8128;
RN
     [1]
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RP
     SEQUENCE FROM N.A.
RX
     MEDLINE=98315113; PubMed=9649539;
     Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
RA
     Figueroa F., Sultmann H., Klein J.;
RA
     "Linkage relationships and haplotype polymorphism among cichlid mhc
RT
     class II B loci.";
RT
     Genetics 149:1527-1537(1998).
RL
     EMBL; AF049982; AAC41321.1; -.
DR
FT
     NON TER
                   1
     NON TER
                         11
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            7 KP 8
Qу
              11
            8 KP 9
Db
RESULT 38
077871
ID
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                 PRELIMINARY;
                                    PRT;
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AC
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DT
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DT
     01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
\mathbf{DT}
     MHC class II B locus 1 (Fragment).
DE
     Oreochromis niloticus (Nile tilapia) (Tilapia nilotica).
os
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Acanthopterygii; Percomorpha; Perciformes; Labroidei;
OC
     Cichlidae; Oreochromis.
OC
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OX
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RP
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     MEDLINE=98315113; PubMed=9649539;
RX
     Malaga-Trillo E., Zaleska-Rutczynska Z., McAndrew B., Vincek V.,
RA
     Figueroa F., Sultmann H., Klein J.;
RA
     "Linkage relationships and haplotype polymorphism among cichlid mhc
RT
RT
     class II B loci.";
     Genetics 149:1527-1537(1998).
RL
     EMBL; AF049980; AAC41319.1; -.
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                          18.2%;
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  Best Local Similarity
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            7 KP 8
Qу
              11
            8 KP 9
Db
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RESULT 39
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DT
     01-DEC-2001 (TrEMBLrel. 19, Last sequence update) 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
GN
     Varanus storri.
OS
     Mitochondrion.
OG
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Varanidae; Varanus.
OC
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OX
RN
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     SEQUENCE FROM N.A.
RP
     Ast J.C.;
RA
     "Mitochondrial DNA evidence and evolution in Varanoidea (Squamata).";
RT
     Cladistics 17:0-0(2001).
RL
     EMBL; AF407531; AAL10145.1; -.
DR
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DR
KW
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FT
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                                                                        Gaps
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             2; Conservative
  Matches
            5 TM 6
Qy
              10 TM 11
Db
RESULT 40
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ID
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AC
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DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
     COI.
GN
     Laudakia tuberculata.
OS
     Mitochondrion.
OG
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iquania; Acrodonta; Agamidae; Agaminae;
OC
OC
     Laudakia.
     NCBI TaxID=118215;
OX
RN
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RP
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     MEDLINE=22114082; PubMed=12118408;
RX
     Macey J.R., Schulte J.A. II, Larson A.;
RA
     "Evolution and information content of the mitochondrial genomic
RT
     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
RN
     [2]
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RP
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RX
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    Macey J.R., Schulte J.A. II, Larson A., Ananjeva N.B., Wang Y.,
RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
RT
RT
     phylogenetics.";
RL
     Syst. Biol. 49:233-256(2000).
     EMBL; AF128514; AAG00779.1; -.
DR
     GO; GO:0005739; C:mitochondrion; IEA.
DR
KW
    Mitochondrion.
FT
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                                                    0: Indels
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Qу
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Db
RESULT 41
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     01-MAR-2001 (TrEMBLrel. 16, Created)
DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
GN
     COI.
     Salea horsfieldii.
OS
     Mitochondrion.
OG
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Draconinae;
OC
OC
     Salea.
     NCBI TaxID=118233;
OX
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=22114082; PubMed=12118408;
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     Macey J.R., Schulte J.A. II, Larson A.;
RA
     "Evolution and information content of the mitochondrial genomic
RT
     structural features illustrated with acrodont lizards.";
RT
RL
     Syst. Biol. 49:257-277(2000).
RN
     [2]
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RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
RT
     phylogenetics.";
RT
     Syst. Biol. 49:233-256(2000).
RL
     EMBL; AF128490; AAG00707.1; -.
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DR
     GO; GO:0005739; C:mitochondrion; IEA.
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KW
FT
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     SEQUENCE
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SQ
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Query Match
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  Best Local Similarity
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                                0; Mismatches
                                                  0; Indels
  Matches
            2; Conservative
            1 AR 2
Qу
              11
            5 AR 6
Db
RESULT 42
09G5Y6
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                                   PRT:
                                           11 AA.
ID
     Q9G5Y6
     09G5Y6;
AC
     01-MAR-2001 (TrEMBLrel. 16, Created)
DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
GN
     COI.
OS
     Agama agama (Red-headed rock agama).
OG
     Mitochondrion.
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Agaminae; Agama.
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OX
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RA
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     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
RN
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RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
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RT
     Syst. Biol. 49:233-256(2000).
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KW
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  Best Local Similarity
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             2; Conservative
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                                                    0; Indels
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Qу
              11
            3 KT 4
Db
RESULT 43
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11 AA.

PRT;

PRELIMINARY;

ID

Q9G5W5

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Q9G5W5;
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DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DΤ
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DE
GN
     COI.
     Laudakia nupta.
OS
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OG
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Agaminae;
OC
OC
     Laudakia.
OX
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RN
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RX
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RA
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RT
     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
RN
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     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
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RT
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RT
     Syst. Biol. 49:233-256(2000).
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  Matches
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                                 0; Mismatches
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Qу
              11
Db
            3 TM 4
RESULT 44
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AC
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     01-JUN-2002 (TrEMBLrel. 21, Created)
DT
     01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DΕ
GN
     COT.
     Ctenophorus clayi (Black-shouldered ground dragon).
OS
OG
     Mitochondrion.
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
oc
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Amphibolurinae;
OC
OC
     Ctenophorus.
OX
     NCBI TaxID=180906;
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RN
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RΡ
    MEDLINE=21623804; PubMed=11754013;
RX
     Melville J., Schulte J.A. II, Larson A.;
RA
    "A molecular phylogenetic study of ecological diversification in the
RT ·
     Australian lizard genus Ctenophorus.";
RT
     J. Exp. Zool. 291:339-353(2001).
RL
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DR
KW
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Qу.
            3 TM 4
Db
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DT
     01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
GN
     COI.
     Ctenophorus tjantjalka.
OS
OG
     Mitochondrion.
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Amphibolurinae;
OC
OC
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RP
     Melville J., Schulte J.A. II, Larson A.;
RA
     "A molecular phylogenetic study of ecological diversification in the
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     Australian lizard genus Ctenophorus.";
RT
     Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
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                                   Score 2; DB 8; Length 11;
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             2; Conservative
  Matches
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Qу
              11
             3 TM 4
Db
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DT
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT
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DE
     COI.
GN
     Laudakia caucasia.
OS
OG
     Mitochondrion.
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Agaminae;
OC
OC
     Laudakia.
OX
     NCBI TaxID=71145;
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RP
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RX
     Macey J.R., Schulte J.A. II, Ananjeva N.B., Larson A.,
RA
     Rastegar-Pouyani N., Shammakov S.M., Papenfuss T.J.;
RA
     "Phylogenetic relationships among Agamid lizards of the Laudakia
RT
     caucasia species group: testing hypotheses of biogeographic
RT
     fragmentation and an area cladogram for the Iranian Plateau.";
RT
     Mol. Phylogenet. Evol. 10:118-131(1998).
RL
RN
     SEQUENCE FROM N.A.
RP
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RX
     Macey J.R., Schulte J.A. II, Kami H.G., Ananjeva N.B., Larson A.,
RA
     Papenfuss T.J.;
RA
     "Testing hypotheses of vicariance in the agamid lizard laudakia
RT
     caucasia from mountain ranges on the northern iranian plateau.";
RT
     Mol. Phylogenet. Evol. 14:479-483(2000).
RL
     EMBL; AF028687; AAC99614.1; -.
DR
     EMBL; AF028681; AAC99596.1; -.
DR
     EMBL; AF028682; AAC99599.1; -.
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     EMBL; AF028684; AAC99605.1; -.
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DR
     EMBL; AF172705; AAF65208.1; -.
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     EMBL; AF172704; AAF65205.1; -.
DR
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DR
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DR
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KW
FT
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             2; Conservative
                                                    0; Indels
  Matches
                                  0; Mismatches
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Qу
              11
            3 TM 4
Db
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RESULT 47
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ID
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AC
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     01-JUN-2002 (TrEMBLrel. 21, Created)
01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT
DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
     Cytochrome c oxidase subunit I (Fragment).
DE
     COI.
GN
     Ctenophorus maculosus (Lake Eyre dragon).
OS
OG
     Mitochondrion.
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Amphibolurinae;
OC
     Ctenophorus.
OC
     NCBI TaxID=180913;
OX
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RP
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     MEDLINE=21623804; PubMed=11754013;
RX
     Melville J., Schulte J.A. II, Larson A.;
RA
     "A molecular phylogenetic study of ecological diversification in the
RT
RT
     Australian lizard genus Ctenophorus.";
     J. Exp. Zool. 291:339-353(2001).
RL
     EMBL; AF375621; AAL78785.1; -.
DR
     GO; GO:0005739; C:mitochondrion; IEA.
DR
     Mitochondrion.
ΚW
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                          11
FT
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                                                                    0;
                                                                        Gaps
             2; Conservative
                                  0; Mismatches
                                                     0;
  Matches
             5 TM 6
Qу
               11
             3 TM 4
Db
RESULT 48
Q9G359
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                                             11 AA.
ΙD
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                  PRELIMINARY;
AC
     09G359;
     01-MAR-2001 (TrEMBLrel. 16, Created)
DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
GN
     COI.
     Japalura flaviceps.
OS
     Mitochondrion.
OG
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Draconinae;
OC
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     NCBI TaxID=52218;
OX
RN
      [1]
      SEQUENCE FROM N.A.
RP
     MEDLINE=97153820; PubMed=9000751;
RX
     Macey J.R., Larson A., Ananjeva N.B., Papenfuss T.J.;
RA
      "Replication slippage may cause parallel evolution in the secondary
RT
```

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structures of mitochondrial transfer RNAs.";
     Mol. Biol. Evol. 14:30-39(1997).
RL
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RN
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RP
     MEDLINE=22114082; PubMed=12118408;
RX
     Macey J.R., Schulte J.A. II, Larson A.;
RA
     "Evolution and information content of the mitochondrial genomic
RT
     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
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RP
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RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
RT
     phylogenetics.";
RT
     Syst. Biol. 49:233-256(2000).
RL
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DR
     GO; GO:0005739; C:mitochondrion; IEA.
DR
KW
     Mitochondrion.
FT
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SQ
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             2; Conservative
                                0; Mismatches
                                                    0; Indels
                                                                      Gaps
  Matches
            1 AR 2
Qy
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DT
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DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
GN
     Ctenophorus femoralis (Long-tailed sand dragon).
OS
OG
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     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Amphibolurinae;
OC
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RP
     MEDLINE=21623804; PubMed=11754013;
RX
     Melville J., Schulte J.A. II, Larson A.;
RA
     "A molecular phylogenetic study of ecological diversification in the
RT
     Australian lizard genus Ctenophorus.";
RT
     J. Exp. Zool. 291:339-353(2001).
RL
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DR
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Qу
              11
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DT
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
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DE
GN
     COI.
     Otocryptis wiegmanni.
OS
OG
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     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Draconinae;
OC
OC
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RX
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RA
     "Evolution and information content of the mitochondrial genomic
RT
     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
RN
     [2]
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RA
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RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
RT
     phylogenetics.";
RT
     Syst. Biol. 49:233-256(2000).
RL
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DR
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DR
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Qу
              11
            5 AR 6
Db
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NON TER

FT

11

11

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09G5X4
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AC
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DТ
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
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DΕ
GN
     Trapelus agilis.
OS
     Mitochondrion.
OG
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OC
OC
     Lepidosauria; Squamata; Iquania; Acrodonta; Aqamidae; Aqaminae;
     Trapelus.
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RT
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RT
     structural features illustrated with acrodont lizards.";
RL
     Syst. Biol. 49:257-277(2000).
RN
     [2]
RP
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RA
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RA
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RT
     phylogenetics.";
     Syst. Biol. 49:233-256(2000).
RL
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DR
     GO; GO:0005739; C:mitochondrion; IEA.
DR
     Mitochondrion.
ΚW
     NON TER
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Qу
              11
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Db
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     01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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DE
GN
     COI.
OS
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OG
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     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
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RESULT 51

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RN
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RP
RA
    Ast J.C.;
    "Mitochondrial DNA evidence and evolution in Varanoidea (Squamata).";
RT
    Cladistics 17:0-0(2001).
RL
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    NON TER
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Qу
             Db
            2 TM 3
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ID
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DT
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DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
GN
     COI.
     Ctenophorus gibba (Bulldust ground dragon).
OS
OG
     Mitochondrion.
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Amphibolurinae;
OC
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RX
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RA
     "A molecular phylogenetic study of ecological diversification in the
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RT
     J. Exp. Zool. 291:339-353(2001).
RL
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DR
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DR
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KW
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  Query Match
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             2; Conservative 0; Mismatches
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  Matches
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Qy.
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DT
     01-JUN-2002 (TrEMBLrel. 21, Last sequence update)
DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
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DE
     COI.
GN
     Ctenophorus ornatus (Ornate dragon).
OS
     Mitochondrion.
OG
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Amphibolurinae;
OC
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RA
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RT
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FT
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  Matches
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Qу
              3 TM 4
Db
RESULT 55
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
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OG
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     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Agaminae;
OC
OC
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RP
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RX
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RA
     "Replication slippage may cause parallel evolution in the secondary
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RT
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RL
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RP
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RA
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RT
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RT
     Syst. Biol. 49:257-277(2000).
RL
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RA
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RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
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RT
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     Syst. Biol. 49:233-256(2000).
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Qy
              3 TM 4
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DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
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GN
     COI.
     Caimanops amphiboluroides (Mulga dragon).
OS
OG
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OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Amphibolurinae;
OC
     Caimanops.
OC
     NCBI TaxID=118092;
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RX .
     Macey J.R., Schulte J.A. II, Larson A.;
RA
     "Evolution and information content of the mitochondrial genomic
RT
     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
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RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
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RT
     Syst. Biol. 49:233-256(2000).
RL
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             2; Conservative
                              0; Mismatches
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Qy
              \mathbf{I}
Db
            3 TM 4
RESULT 57
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DT
     01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
ĎΤ
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
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DE
GN
     COI.
     Ctenophorus reticulatus (Western netted dragon).
OS
     Mitochondrion.
OG
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Amphibolurinae;
OC
OC
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RP
     Melville J., Schulte J.A. II, Larson A.;
RA
     "A molecular phylogenetic study of ecological diversification in the
RT
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RT
     Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
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KW
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             2; Conservative
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Qу
              3 TM 4
Db
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DΤ
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
DE
     Cytochrome c oxidase subunit I (Fragment).
GN
     COI.
     Rankinia adelaidensis (Heath dragon).
OS
OG
    Mitochondrion.
OC
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     Lepidosauria; Squamata; Iquania; Acrodonta; Agamidae; Amphibolurinae;
OC
OC
     Rankinia.
OX
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RX
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RA
     "Evolution and information content of the mitochondrial genomic
RT
     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
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RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
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RT
     Syst. Biol. 49:233-256(2000).
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              II
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Db
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     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
GN
     Diporiphora bilineata (Two-lined dragon).
OS
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RESULT 58

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OG
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OC
     Lepidosauria; Squamata; Iquania; Acrodonta; Agamidae; Amphibolurinae;
OC
     Diporiphora.
OC
     NCBI TaxID=118204;
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RT
     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
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RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
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ΚW
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FT
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Qу
              3 TM 4
Db
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DT
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
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DΕ
GN
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OS
OG
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     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
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OC
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     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
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RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
RT
     phylogenetics.";
RT
     Syst. Biol. 49:233-256(2000).
RL
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DR
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KW
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Qу
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Db
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ΙD
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DT
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DT
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DT
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DΕ
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OS
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OC
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     Macey J.R., Schulte J.A. II, Larson A.;
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     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
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RP
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RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
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RT
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RT
     Syst. Biol. 49:233-256(2000).
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Qу
              11
            3 TM 4
Db
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DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
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OG
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OC
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     Macey J.R., Larson A., Ananjeva N.B., Papenfuss T.J.;
RA
     "Replication slippage may cause parallel evolution in the secondary
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RT
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DT
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DE
GN
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OS
     Mitochondrion.
OG
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OC
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RT
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     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
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RA
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RT
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QУ
               11
Db
             3 TM 4
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DT
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DT
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DΕ
GN
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OS
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OG
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OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Agaminae;
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     Rastegar-Pouyani N., Shammakov S.M., Papenfuss T.J.;
RA
     "Phylogenetic relationships among Agamid lizards of the Laudakia
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     caucasia species group: testing hypotheses of biogeographic
RT
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     Mol. Phylogenet. Evol. 10:118-131(1998).
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  Matches
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Qу
              | \cdot |
            3 TM 4
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ID
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AC
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DT
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DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
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DE
GN
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     Ctenophorus fordi (Mallee dragon).
OS
OG
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OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Amphibolurinae;
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RA
     "A molecular phylogenetic study of ecological diversification in the
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RT
     J. Exp. Zool. 291:339-353(2001).
RL
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FT
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                                                      Indels
                                                                     Gaps
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Qy
              11
Ďb
            3 TM 4
RESULT 66
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DT
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Qу
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            4 AR 5
Db
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RESULT 67 Q9G619

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DT
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DT
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DT
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OG
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OC
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RA
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RT
     Syst. Biol. 49:257-277(2000).
RL
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RA
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RA
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RT
     Syst. Biol. 49:233-256(2000).
RL
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DT
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     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
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DE
GN
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OS
OG
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OC
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RT
     Syst. Biol. 49:257-277(2000).
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RA
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RT
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QУ
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            3 TM 4
Db
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
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DE
GN
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OS
OG
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OC
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 RA
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     genomic structural features illustrated with acrodont lizards.";
 RT
      Syst. Biol. 49:257-277(2000).
 RL
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 RA
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"Rostral Horn Evolution among Agamid Lizards of the Genus Ceratophora
RT
     Endemic to Sri Lanka.";
RT
     Mol. Phylogenet. Evol. 22:111-117(2002).
RL
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DR
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KW
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Qу
              \Box
            5 AR 6
Db
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DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
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DΕ
GN
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OS
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OG
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OC
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RA
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RT
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RL
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Qу
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             5 AR 6
Db
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RESULT 71 Q8SKQ1

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DT
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DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
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DE
GN
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OS
OG
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OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Amphibolurinae;
OC
     Ctenophorus.
OC
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RN
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RX
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RA
     "A molecular phylogenetic study of ecological diversification in the
RT
     Australian lizard genus Ctenophorus.";
RT
     J. Exp. Zool. 291:339-353(2001).
RL
     EMBL; AF375622; AAL78788.1; -.
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SQ
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                                 0; Mismatches
                                                    0;
                                                        Indels
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Qу
              \perp
            3 TM 4
Db
RESULT 72
079639
                                    PRT;
                                            11 AA.
     079639
                 PRELIMINARY;
ID
AC
     079639;
     01-NOV-1998 (TrEMBLrel. 08, Created)
DT
     01-NOV-1998 (TrEMBLrel. 08, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
GN
     COI.
OS
     Laudakia lehmanni.
     Mitochondrion.
OG
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Iguania; Acrodonta; Agamidae; Agaminae;
OC
OC
     Laudakia.
     NCBI TaxID=71148;
OX
RN
     [1]
RP
     SEQUENCE FROM N.A.
     MEDLINE=98424476; PubMed=9751922;
RX
     Macey J.R., Schulte J.A. II, Ananjeva N.B., Larson A.,
RA
     Rastegar-Pouyani N., Shammakov S.M., Papenfuss T.J.;
RA
      "Phylogenetic relationships among Agamid lizards of the Laudakia
RT
      caucasia species group: testing hypotheses of biogeographic
RT
```

```
fragmentation and an area cladogram for the Iranian Plateau.";
RT
     Mol. Phylogenet. Evol. 10:118-131(1998).
RL
     EMBL; AF028677; AAC99584.1; -.
DR
     PIR; T12244; T12244.
DR
     GO; GO:0005739; C:mitochondrion; IEA.
DR
     Mitochondrion.
KW
                         11
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                  11
FΤ
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Db
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     01-MAR-2001 (TrEMBLrel. 16, Created)
DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
DT
     Cytochrome c oxidase subunit I (Fragment).
DE
     COI.
GN
     Amphibolurus muricatus (Jacky dragon).
OS
     Mitochondrion.
OG
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
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OC
OC
     Amphibolurus.
OX
     NCBI TaxID=116113;
RN
     [1]
     SEQUENCE FROM N.A.
RP
     MEDLINE=22114082; PubMed=12118408;
RX
     Macey J.R., Schulte J.A. II, Larson A.;
RA
     "Evolution and information content of the mitochondrial genomic
RT
     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
RN
     SEQUENCE FROM N.A.
RP
     MEDLINE=22114081; PubMed=12118407;
RX
     Macey J.R., Schulte J.A. II, Larson A., Ananjeva N.B., Wang Y.,
RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
RT
     phylogenetics.";
RT
     Syst. Biol. 49:233-256(2000).
RL
     EMBL; AF128468; AAG00641.1; -.
DR
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DR
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KW
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     NON TER
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  Best Local Similarity
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  Matches
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5 TM 6
Qy
              | \cdot |
            3 TM 4
Db
RESULT 74
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                  PRELIMINARY;
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AC
     035374;
     01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
DT
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
     Pl protein (Fragment).
DE
     Paramecium tetraurelia.
OS
     Mitochondrion.
OG
     Eukaryota; Alveolata; Ciliophora; Oligohymenophorea; Peniculida;
OC
OC
     Paramecium.
OX
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RN
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RP
RC
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RX
     Pritchard A.E., Seilhamer J.J., Cummings D.J.;
RA
     "Paramecium mitochondrial DNA sequences and RNA transcripts for
RT
     cytochrome oxidase subunit I, URF1, and three ORFs adjacent to the
RT
     replication origin.";
RT
     Gene 44:243-253(1986).
RL
     EMBL; M15280; AAA79267.1; -.
DR
     GO; GO:0005739; C:mitochondrion; IEA.
DR
     Mitochondrion.
KW
                          11
FT
     NON TER
                   11
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                         1266 MW;
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  Matches
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Qу
               11
Dh
             8 RS 9
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                                     PRT;
                                              11 AA.
     Q9G5V0
ΙĎ
AC
     09G5V0;
     01-MAR-2001 (TrEMBLrel. 16, Created)
DT
     01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DT
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DE
GN
     COI.
OS
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OG
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OC
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OC
OC
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RA
     "Evolution and information content of the mitochondrial genomic
RT
     structural features illustrated with acrodont lizards.";
RT
     Syst. Biol. 49:257-277(2000).
RL
RN
RP
     SEQUENCE FROM N.A.
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RX
    Macey J.R., Schulte J.A. II, Larson A., Ananjeva N.B., Wang Y.,
RA
     Pethiyagoda R., Rastegar-Pouyani N., Papenfuss T.J.;
RA
     "Evaluating Trans-Tethys migration: An example using Acrodont lizard
RT
RT
     phylogenetics.";
     Syst. Biol. 49:233-256(2000).
RL
DR
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DR-
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KW
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    NON TER
FT
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SQ
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                                                                             0;
 Matches
            2; Conservative
                              0; Mismatches
                                                   0; Indels
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            5 TM 6
Qу
              11
            3 TM 4
Db
```

Search completed: April 8, 2004, 15:46:06 Job time : 28.7692 secs

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OM protein - protein search, using sw model

Run on: April 8, 2004, 15:30:07; Search time 5.15385 Seconds

(without alignments)

111.135 Million cell updates/sec

Title: US-09-787-443A-12

Perfect score: 11

Sequence: 1 ARQKTMKPRRS 11

Scoring table: OLIGO

Gapop 60.0 , Gapext 60.0

Searched: 141681 seqs, 52070155 residues

Word size : 0

Total number of hits satisfying chosen parameters: 70

Minimum DB seq length: 11 Maximum DB seq length: 11

Post-processing: Listing first 100 summaries

Database: SwissProt 42:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

		8					
Result		Query			•		
No.	Score	Match	Length	DB	ID	Descrip	tion
1	 3	27.3	11	1	Q2OA COMTE	P80 4 64	comamonas t
2	3	27.3	11	1	TKNA GADMO	P28498	gadus morhu
3	3	27.3	11	1	TKNA ONCMY	P28499	oncorhynchu
4	3	27.3	11	1	TKNA SCYCA	P41333	scyliorhinu
5	2	18.2	11	1	BPP3 BOTIN	P30423	bothrops in
6	2	18.2	11	1	BPP4 BOTIN	P30424	bothrops in
7	2	18.2	11	1	BPPB AGKHA	P01021	agkistrodon
8	2	18.2	11	1	CSI5 BACSU	P81095	bacillus su
9	2	18.2	11	1	ES1 RAT	P56571	rattus norv
10	2	18.2	11	1	MHBI KLEPN	P80580	klebsiella
11	2	18.2	11	1	OAIF SARBU	P83518	sarcophaga
12	2	18.2	11	1	PKC1 CARMO	P82684	carausius m
13	2	18.2	11	1	RR2 CONAM	P42341	conopholis
14	2	18.2	11	1	RS30 ONCMY	P83328	oncorhynchu
15	2	18.2	11	1	TIN1 HOPTI	P82651	hoplobatrac
16	2	18.2	11.	1	TKN2 UPERU	P08616	uperoleia r
17	2	18.2	11	1	TKNA_CHICK	P19850	gallus gall

1.0	2	10 2	11	1	muna HODGE	D0120	O coming cabal
18	2	18.2	11	1	TKNA_HORSE		0 equus cabal 8 rana catesb
19	2	18.2	11	1	TKNA_RANCA		
20	2	18.2	11	1	TKNA_RANRI		7 rana ridibu
21	2	18.2	11	1	TKND_RANCA		1 rana catesb
22	2	18.2	11	1	UXB2_YEAST		3 saccharomyc
23	1	9.1	11	1	ANGT_CRIGE		7 crinia geor
24	1	9.1	11	1	ASL1_BACSE		6 bacteroides
25	1	9.1	11	1	ASL2_BACSE		7 bacteroides
26	1	9.1	11	1	BPP_AGKHP		2 agkistrodon
27	1	9.1	11	1	BRK_MEGFL		7 megascolia
28	1	9.1	11	1	CA21_LITCI	-	7 litoria cit
29	1	9.1	11	1	CA22_LITCI		8 litoria cit
30	1	9.1	11	1	CA31_LITCI		9 litoria cit
31	1	9.1	11	1	CA32_LITCI		0 litoria cit
32	1	9.1	11	1	CA41_LITCI		1 litoria cit
33	1	9.1	11	1	CA42_LITCI		2 litoria cit
34	1	9.1	11	1	CEP1_ACHFU	P2279	0 achatina f u
35	1	9.1	11	1	CORZ_PERAM	P1149	6 periplaneta
36	1	9.1	11	1	COXA_CANFA	P9950	1 canis famil
37	1	9.1	11	1	CX5A CONAL	P5884	8 conus aulic
38	1	9.1	11	1	CX5B_CONAL	P5884	9 conus aulic
39	1	9.1	11	1	CXL1 CONMR	P5880	7 conus marmo
40	1	9.1	11	1	EFG CLOPA	P8135	0 clostridium
41	1	9.1	11	1	FAR6 PENMO	P8332	1 penaeus mon
42	1	9.1	11	1	FAR9 CALVO	P4186	4 calliphora
43	1	9.1	11	1	HS70 PINPS	P8167	2 pinus pinas
44	1	9.1	11	1	LADD ONCMY	P8101	8 oncorhynchu
45	1	9.1	11	1	LPW THETH		4 thermus the
46	1	9.1	11	1	LSK1 LEUMA	P0442	8 leucophaea
47	1	9.1	11	1	LSKP PERAM		5 periplaneta
48	1	9.1	11	1	MLG THETS		9 theromyzon
49	1	9.1	11	1	MORN HUMAN		3 homo sapien
50	1	9.1	11	1	NUHM CANFA		0 canis famil
51	1	9.1	11	1	NXSN PSETE		2 pseudonaja
52	$\overline{1}$	9.1	11	1	PQQC PSEFL		3 pseudomonas
53	1	9.1	11	1	PVK1 PERAM		7 periplaneta
54	1	9.1	11	1	RANC RANPI		1 rana pipien
55	1	9.1	11	1	RRPL CHAV		9 chandipura
56	1	9.1	$\frac{1}{1}$	1	T2P1 PROVU		1 proteus vul
57	1	9.1	11	1	TIN4 HOPTI		4 hoplobatrac
58	1	9.1	11	1	TKC2 CALVO		8 calliphora
59	1	9.1	11	1	TKN1 PSEGU		6 pseudophryn
60	1	9.1	11	1	TKN1 UPEIN		6 uperoleia i
61	1	9.1	11	1	TKN1 UPERU		2 uperoleia r
62	1	9.1	11	1	TKN2 PSEGU		7 pseudophryn
63	1	9.1	11	1	TKN3 PSEGU		8 pseudophryn
64	1	9.1	11	1	TKN4 PSEGU		9 pseudophryn
65	1	9.1	11	1	TKN5 PSEGU		0 pseudophryn
	1	9.1	11	1	_		3 eledone mos
66 67	1	9.1	11	1	TKN_ELEMO TKN PHYFU		5 physalaemus
	1	9.1	11	1	UF05 MOUSE		3 mus musculu
68 60	1	9.1	11	1	ULAG HUMAN		3 homo sapien
69 70				1	RE41 LITRU		4 litoria rub
70	0	0.0	11	T	VEAT_PTIKO	F8207	- IICOLIA LUD

```
RESULT 1
Q2OA COMTE
     Q2OA COMTE
                    STANDARD;
                                   PRT;
                                            11 AA.
ΙD
AC
     P80464;
DT
     01-NOV-1995 (Rel. 32, Created)
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     16-OCT-2001 (Rel. 40, Last annotation update)
DT
     Quinoline 2-oxidoreductase, alpha chain (EC 1.3.99.17) (Fragment).
DΕ
     Comamonas testosteroni (Pseudomonas testosteroni).
OS
     Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
OC
OC
     Comamonadaceae; Comamonas.
OX
     NCBI TaxID=285;
RN
     [1]
RΡ
     SEQUENCE.
RC
     STRAIN=63;
    MEDLINE=96035889; PubMed=7556204;
RX
RA
     Schach S., Tshisuaka B., Fetzner S., Lingens F.;
RT
     "Quinoline 2-oxidoreductase and 2-oxo-1,2-dihydroquinoline 5,6-
     dioxygenase from Comamonas testosteroni 63. The first two enzymes in
RT
RT
     quinoline and 3-methylquinoline degradation.";
RL
     Eur. J. Biochem. 232:536-544(1995).
     -!- FUNCTION: Converts (3-methyl-)-quinoline to (3-methyl-)2-oxo-
CC
CC
         1,2-dihydroquinoline.
     -!- CATALYTIC ACTIVITY: Quinoline + acceptor + H(2)0 = isoquinolin-
CC
CC
         1(2H)-one + reduced acceptor.
     -!- COFACTOR: FAD, molybdenum and iron-sulfur.
CC
     -!- PATHWAY: Degradation of quinoline and (3-methyl-)quinoline; first
CC
CC
         step.
CC
     -!- SUBUNIT: Heterohexamer of two alpha chains, two beta chains, and
         two gamma chains (Probable).
CC
     PIR; S66606; S66606.
DR
     Oxidoreductase; Flavoprotein; FAD; Molybdenum.
KW
FT
     NON TER
                  11
                         11
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                        1213 MW;
                                  869094322B1DC2CA CRC64;
SQ
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                          100.0%; Pred. No. 1e+03;
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            7 KPR 9
QУ
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            9 KPR 11
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                                    PRT:
                                            11 AA.
ID
AC
     P28498;
DT
     01-DEC-1992 (Rel. 24, Created)
     01-DEC-1992 (Rel. 24, Last sequence update)
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DΕ
     Substance P.
OS
     Gadus morhua (Atlantic cod).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC
     Acanthomorpha; Paracanthopterygii; Gadiformes; Gadidae; Gadus.
OC
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OX
    NCBI TaxID=8049;
RN
    [1]
    SEOUENCE.
RP
RC
    TISSUE=Brain;
RX
    MEDLINE=92298992; PubMed=1376687;
RA
     Jensen J., Conlon J.M.;
     "Substance-P-related and neurokinin-A-related peptides from the brain
RT
RT
    of the cod and trout.";
RL
    Eur. J. Biochem. 206:659-664(1992).
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
    -!- SIMILARITY: Belongs to the tachykinin family.
DR
    PIR; S23306; S23306.
    InterPro; IPR002040; Tachy Neurokinin.
DR
    InterPro; IPR008215; Tachykinin.
DR
    Pfam; PF02202; Tachykinin; 1.
DR
    SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
KW
    Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
    MOD RES
                                  AMIDATION (BY SIMILARITY).
FT
                  11
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SQ
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  Query Match
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                                                 0; Indels
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                                                                      Gaps
                                                                              0;
 Matches
            3; Conservative
            7 KPR 9
Qу
              111
            1 KPR 3
Dh
RESULT 3
TKNA ONCMY
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                                   PRT;
                                           11 AA.
AC
     P28499;
     01-DEC-1992 (Rel. 24, Created)
DT
     01-DEC-1992 (Rel. 24, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Substance P.
     Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC
     Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OC
OX
     NCBI TaxID=8022;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Brain;
RX
    MEDLINE=92298992; PubMed=1376687;
     Jensen J., Conlon J.M.;
RA
     "Substance-P-related and neurokinin-A-related peptides from the brain
RT
RT
     of the cod and trout.";
     Eur. J. Biochem. 206:659-664(1992).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
```

```
secretagogues, and contract (directly or indirectly) many smooth
CC
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; S23308; S23308.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
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     PROSITE; PS00267; TACHYKININ; 1.
KW
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                                  AMIDATION (BY SIMILARITY).
     MOD RES
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  Best Local Similarity
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                                                    0; Indels
                                                                               0;
                                                                  0;
                                                                      Gaps
  Matches
            3; Conservative
            7 KPR 9
Qy
              \mathbf{I}
Db
            1 KPR 3
RESULT 4
TKNA SCYCA -
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                                    PRT;
                                            11 AA.
     P41333;
AC
DT
     01-FEB-1995 (Rel. 31, Created)
     01-FEB-1995 (Rel. 31, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Substance P.
     Scyliorhinus canicula (Spotted dogfish) (Spotted catshark).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Chondrichthyes;
OC
     Elasmobranchii; Galeomorphii; Galeoidea; Carcharhiniformes;
OC
OC
     Scyliorhinidae; Scyliorhinus.
OX
     NCBI TaxID=7830;
RN
     [1]
     SEQUENCE.
RP
RC
     TISSUE=Brain;
     MEDLINE=93292508; PubMed=7685693;
RX
     Waugh D., Wang Y., Hazon N., Balment R.J., Conlon J.M.;
RA
     "Primary structures and biological activities of substance-P-related
RT
     peptides from the brain of the dogfish, Scyliorhinus canicula.";
RT
     Eur. J. Biochem. 214:469-474(1993).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
DR
     PIR; $33300; $33300.
     InterPro; IPR002040; Tachy Neurokinin.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
     Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
ΚW
FT
                         11
                                  AMIDATION.
     MOD RES
                  11
                       1278 MW; 214860DEC9D6D867 CRC64;
     SEQUENCE
                11 AA;
SQ
```

```
Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1e+03;
                                                                  0; Gaps
                                                                               0;
             3; Conservative
                                 0; Mismatches
                                                    0; Indels
            7 KPR 9
Qу
              III
            1 KPR 3
Db
RESULT 5
BPP3 BOTIN
     BPP3 BOTIN
                    STANDARD;
                                    PRT;
                                            11 AA.
ID
     P30423;
AC
DT
     01-APR-1993 (Rel. 25, Created)
DT
     01-FEB-1994 (Rel. 28, Last sequence update)
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Bradykinin-potentiating peptide S4,3,2 (10C) (Angiotensin-converting
DΕ
DE
     enzyme inhibitor).
OS
     Bothrops insularis (Island jararaca) (Queimada jararaca).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
     Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC
OC
     Viperidae; Crotalinae; Bothrops.
OX
     NCBI TaxID=8723;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Venom;
     MEDLINE=90351557; PubMed=2386615;
RX
     Cintra A.C.O., Vieira C.A., Giglio J.R.;
RA
     "Primary structure and biological activity of bradykinin potentiating
RT
     peptides from Bothrops insularis snake venom.";
RT
     J. Protein Chem. 9:221-227(1990).
RL
CC
     -!- FUNCTION: This peptide both inhibits the activity of the
CC
         angiotensin-converting enzyme and enhances the action of
CC
         bradykinin by inhibiting the kinases that inactivate it.
         It acts as an indirect hypotensive agent.
CC
     PIR; C37196; C37196.
DR
     Hypotensive agent; Pyrrolidone carboxylic acid.
KW
                                   PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                          1
     SEQUENCE
                11 AA; 1199 MW;
                                 20B25813C7741777 CRC64;
SQ
                                   Score 2; DB 1; Length 11;
  Query Match
                          18.2%;
                                   Pred. No. 1.3e+04;
  Best Local Similarity
                          100.0%;
                                  0; Mismatches
                                                    0;
                                                       Indels
                                                                      Gaps
                                                                               0;
             2: Conservative
            8 PR 9
QУ
              11
            5 PR 6
Db
RESULT 6
BPP4 BOTIN
     BPP4 BOTIN
                                    PRT;
                                            11 AA.
                    STANDARD;
ID
AC
     P30424;
DT
     01-APR-1993 (Rel. 25, Created)
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DΤ
     Bradykinin-potentiating peptide S4,1,2 (Angiotensin-converting
DE
```

27.3%; Score 3; DB 1;

Length 11;

```
DE
     enzyme inhibitor).
     Bothrops insularis (Island jararaca) (Queimada jararaca).
os
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC
    Viperidae; Crotalinae; Bothrops.
OC
OX
    NCBI TaxID=8723;
RN
     [1]
RP
     SEQUENCE.
RC
    TISSUE=Venom;
RX
    MEDLINE=90351557; PubMed=2386615;
    Cintra A.C.O., Vieira C.A., Giglio J.R.;
RA
     "Primary structure and biological activity of bradykinin potentiating
RT
    peptides from Bothrops insularis snake venom.";
RT
RL
     J. Protein Chem. 9:221-227(1990).
CC
     -!- FUNCTION: This peptide both inhibits the activity of the
         angiotensin-converting enzyme and enhances the action of
CC
CC
         bradykinin by inhibiting the kinases that inactivate it.
CC
         It acts as an indirect hypotensive agent.
DR
     PIR; D37196; D37196.
     Hypotensive agent; Pyrrolidone carboxylic acid.
KW
FT
    MOD RES
                                  PYRROLIDONE CARBOXYLIC ACID.
SQ
     SEQUENCE
                11 AA; 1143 MW; 20BBBF13C7741777 CRC64;
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
             2; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0;
                                                                      Gaps
                                                                               0;
            8 PR 9
Qу
              \mathbf{I}
            5 PR 6
Db
RESULT 7
BPPB AGKHA
     BPPB AGKHA
                    STANDARD;
                                   PRT;
                                            11 AA.
AC
     P01021;
     21-JUL-1986 (Rel. 01, Created)
DT
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Bradykinin-potentiating peptide B (Angiotensin-converting
DE
     enzyme inhibitor).
DE
     Agkistrodon halys blomhoffi (Mamushi) (Gloydius blomhoffii).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC
     Viperidae; Crotalinae; Gloydius.
OC
OX
     NCBI TaxID=242054;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Venom;
     Kato H., Suzuki T.;
RA
     "Amino acid sequence of bradykinin-potentiating peptide isolated from
RT
RT
     the venom of Agkistrodon halys blomhoffii.";
RL
     Proc. Jpn. Acad., B, Phys. Biol. Sci. 46:176-181(1970).
     -!- FUNCTION: This peptide both inhibits the activity of the
CC
CC
         angiotensin-converting enzyme and enhances the action of
CC
         bradykinin by inhibiting the kinases that inactivate it.
CC
         It acts as an indirect hypotensive agent.
```

```
Hypotensive agent; Pyrrolidone carboxylic acid.
KW
     MOD RES
                  1
                        1
                              PYRROLIDONE CARBOXYLIC ACID.
FT
     SEQUENCE
               11 AA; 1199 MW; 295CBF0627741777 CRC64;
SQ
                          18.2%; Score 2; DB 1; Length 11;
 Query Match
 Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
           2; Conservative 0; Mismatches
                                                  0;
                                                      Indels
                                                                 0; Gaps
                                                                             0;
 Matches
QУ
            8 PR 9
              11
            5 PR 6
Db
RESULT 8
CSI5 BACSU
                                   PRT;
                                           11 AA.
    CSI5 BACSU
                    STANDARD;
AC
     P81095;
DТ
     15-JUL-1998 (Rel. 36, Created)
     15-JUL-1998 (Rel. 36, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Cold shock protein CSI5 (11 kDa cold shock protein) (Fragment).
DE
    Bacillus subtilis.
OS
OC
     Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
OX
    NCBI TaxID=1423;
RN
     [1]
RP
     SEQUENCE.
RC
     STRAIN=168 / JH642;
     Graumann P.L., Schmid R., Marahiel M.A.;
RA
    Submitted (OCT-1997) to Swiss-Prot.
RL
RN
     [2]
RP
    CHARACTERIZATION.
     STRAIN=168 / JH642;
RC
    MEDLINE=96345629; PubMed=8755892;
RX
     Graumann P., Schroeder K., Schmid R., Marahiel M.A.;
RA
     "Cold shock stress-induced proteins in Bacillus subtilis.";
RT
     J. Bacteriol. 178:4611-4619(1996).
RL
    -!- SUBCELLULAR LOCATION: Cytoplasmic.
CC
    -!- INDUCTION: In response to low temperature.
CC
     -!- CAUTION: Could not be found in the genome of B. subtilis 168.
CC
                  11
FT
     NON TER
                         11
               11 AA; 1360 MW; 15F6ECEE6322C330 CRC64;
     SEQUENCE
SQ
                          18.2%; Score 2; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1.3e+04;
                                0; Mismatches
                                                                 0; Gaps
                                                                             0;
 Matches
             2; Conservative
                                                   0; Indels
            7 KP 8
Qу
              11
            7 KP 8
Db
RESULT 9
ES1 RAT
    ES1 RAT
                    STANDARD;
                                   PRT;
                                           11 AA.
ΙD
     P56571;
AC
     15-DEC-1998 (Rel. 37, Created)
DT
```

DR

PIR; A01254; XASNBA.

```
DT
     15-DEC-1998 (Rel. 37, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
     ES1 protein, mitochondrial (Fragment).
DE
OS
     Rattus norvegicus (Rat).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX
     NCBI TaxID=10116;
RN
     [1]
RP
     SEQUENCE.
     STRAIN=Wistar; TISSUE=Heart;
RC
     Li X.-P., Pleissner K.-P., Scheler C., Regitz-Zagrosek V., Salikov J.,
RA
     Jungblut P.R.;
RA
RL
     Submitted (SEP-1998) to Swiss-Prot.
CC
     -!- SUBCELLULAR LOCATION: Mitochondrial (Potential).
CC
     -!- MISCELLANEOUS: By 2D-PAGE, the determined pI of this protein (spot
         P2) is: 8.9, its MW is: 25 kDa.
CC
CC
     -!- SIMILARITY: BELONGS TO THE ES1 FAMILY.
KW
     Mitochondrion.
FT
     NON TER
                  11
                         11
SQ
     SEQUENCE
                11 AA;
                        1142 MW; D862272D32C72DC2 CRC64;
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                 0; Mismatches
                                                   0;
                                                       Indels
                                                                  0; Gaps
                                                                              0;
  Matches
             2; Conservative
            1 AR 2
Qу
              11
            2 AR 3
Db
RESULT 10
MHBI KLEPN
                                   PRT;
     MHBI KLEPN
                    STANDARD;
                                            11 AA.
ID
     P80580;
AC
     01-OCT-1996 (Rel. 34, Created)
DT
     01-OCT-1996 (Rel. 34, Last sequence update)
DT
     01-NOV-1997 (Rel. 35, Last annotation update)
DT
     Maleylpyruvate isomerase (EC 5.2.1.4) (Fragment).
DE
GN
     MHBI.
OS
     Klebsiella pneumoniae.
     Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
     Enterobacteriaceae; Klebsiella.
OC
OX
     NCBI TaxID=573;
RN
     [1]
RP
     SEQUENCE.
     MEDLINE=96349117; PubMed=8760924;
RX
RA
     Robson N.D., Parrott S., Cooper R.A.;
     "In vitro formation of a catabolic plasmid carrying Klebsiella
RT
     pneumoniae DNA that allows growth of Escherichia coli K-12 on 3-
RT
RT
     hydroxybenzoate.";
     Microbiology 142:2115-2120(1996).
RL
     -!- CATALYTIC ACTIVITY: 3-maleylpyruvate = 3-fumarylpyruvate.
CC
KW
     Isomerase.
FT
     NON TER
                  11
                        1387 MW; 1EE0E2DD49C9D5AB CRC64;
SQ
     SEQUENCE
                11 AA;
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
```

```
Matches
            2; Conservative 0; Mismatches
                                                         Indels
                                                                    0; Gaps
                                                                                 0;
            6 MK 7
Qy
              \mathbf{I}
Db
            1 MK 2
RESULT 11
OAIF SARBU
     OAIF SARBU
                    STANDARD;
                                    PRT;
                                             11 AA.
ID
AC
     P83518;
DT
     10-OCT-2003 (Rel. 42, Created)
     10-OCT-2003 (Rel. 42, Last sequence update)
10-OCT-2003 (Rel. 42, Last annotation update)
DT
DT
     Ovary-derived ACE interactive factor (Neb-ODAIF) [Contains: Neb-
DE
DE
     ODAIF(1-9); Neb-ODAIF(1-7)].
OS
     Sarcophaga bullata (Grey flesh fly) (Neobellieria bullata).
OC
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
     Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Oestroidea;
OC
OC
     Sarcophagidae; Sarcophaga.
OX
     NCBI TaxID=7385;
RN
     [1]
RP
     SEQUENCE, SYNTHESIS, CHARACTERIZATION, AND MASS SPECTROMETRY.
RC
     TISSUE=Ovary;
RX
     MEDLINE=22272747; PubMed=12383874;
     Vandingenen A., Hens K., Baggerman G., Macours N., Schoofs L.,
RA
     De Loof A., Huybrechts R.;
RA
     "Isolation and characterization of an angiotensin converting enzyme
RT
     substrate from vitellogenic ovaries of Neobellieria bullata.";
RT
     Peptides 23:1853-1863(2002).
RL
     -!- FUNCTION: Substrate for angiotensin converting enzyme (ACE) in
CC
CC
         vitro.
CC
     -!- PTM: ACE hydrolyzes Neb-ODAIF by sequentially cleaving off two C-
CC
         terminal dipeptides.
     -!- MASS SPECTROMETRY: MW=1312.7; METHOD=MALDI; RANGE=1-11.
CC
     -!- SIMILARITY: To the N-terminal part of insect vitellogenins.
CC
                          11
                                   NEB-ODAIF.
FT
     PEPTIDE
                   1
FT
     PEPTIDE
                   1
                           9
                                   NEB-ODAIF(1-9).
                           7
                                   NEB-ODAIF(1-7).
FT
     PEPTIDE
                    1
                                   4E114BB566C5A763 CRC64;
SQ
     SEQUENCE
                11 AA; 1314 MW;
  Query Match
                           18.2%; Score 2; DB 1; Length 11;
  Best Local Similarity
                           100.0%; Pred. No. 1.3e+04;
                                0; Mismatches
                                                                                 0:
 Matches
             2; Conservative
                                                     0; Indels
                                                                    0; Gaps
            7 KP 8
Qv
              11
Db
            4 KP 5
RESULT 12
PKC1 CARMO
     PKC1 CARMO
ID
                    STANDARD;
                                    PRT;
                                             11 AA.
AC
     P82684;
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
```

Best Local Similarity 100.0%; Pred. No. 1.3e+04;

```
DT
     16-OCT-2001 (Rel. 40, Last annotation update)
DE
     Pyrokinin-1 (Cam-PK-1) (FXPRL-Amide).
OS
     Carausius morosus (Indian stick insect).
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
OC
     Neoptera; Orthopteroidea; Phasmatodea; Euphasmida; Phasmatoidea;
OC
     Heteronemiidae; Carausius.
OX
     NCBI TaxID=7022;
RN
     [1]
RP
     SEQUENCE, FUNCTION, AND MASS SPECTROMETRY.
RC
     TISSUE=Corpora cardiaca;
RA
     Predel R., Kellner R., Gaede G.;
RT
     "Myotropic neuropeptides from the retrocerebral complex of the stick
RT
     insect, Carausius morosus (Phasmatodea: Lonchodidae).";
RL
     Eur. J. Entomol. 96:275-278(1999).
CC
     -!- FUNCTION: Mediates visceral muscle contractile activity (myotropic
CC
         activity).
CC
     -!- MASS SPECTROMETRY: MW=1235; METHOD=MALDI.
CC
     -!- SIMILARITY: Belongs to the pyrokinin family.
DR
     InterPro; IPR001484; Pyrokinin.
DR
     PROSITE; PS00539; PYROKININ; FALSE NEG.
KW
     Neuropeptide; Amidation; Pyrokinin.
FT
     MOD RES
                 11
                        11
                                  AMIDATION.
SO
     SEQUENCE
                11 AA; 1236 MW; 2BFA5225BB46C1A8 CRC64;
  Query Match
                          18.2%; Score 2; DB 1; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
  Matches
            2; Conservative
                               0; Mismatches
                                                  0; Indels 0; Gaps
                                                                               0;
            8 PR 9
Qу
              11
            9 PR 10
RESULT 13
RR2 CONAM
     RR2 CONAM
ID
                    STANDARD;
                                   PRT;
                                            11 AA.
AC
     P42341;
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update) 28-FEB-2003 (Rel. 41, Last annotation update)
DT
DT
     Chloroplast 30S ribosomal protein S2 (Fragment).
DE
GN
     RPS2.
OS
     Conopholis americana (Squawroot).
OG
     Chloroplast.
     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC
     Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;
OC
OC
     lamiids; Lamiales; Orobanchaceae; Orobancheae; Conopholis.
OX
     NCBI TaxID=4179;
RN
     [1]
RP
     SEQUENCE FROM N.A.
RX
    MEDLINE=92145776; PubMed=1723664;
     Taylor G., Wolfe K.H., Morden C.W., Depamphilis C.W., Palmer J.D.;
RA
     "Lack of a functional plastid tRNA(Cys) gene is associated with loss
RT
RT
     of photosynthesis in a lineage of parasitic plants.";
     Curr. Genet. 20:515-518(1991).
RL
     -!- SIMILARITY: Belongs to the S2P family of ribosomal proteins.
CC
CC
```

```
CC
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    between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC
DR
     EMBL; X64567; CAA45868.1; -.
DR
     PIR; S32575; S32575.
DR
    HAMAP; MF 00291; -; 1.
    InterPro; IPR001865; Ribosomal_S2.
DR
DR
     PROSITE; PS00962; RIBOSOMAL S2 1; PARTIAL.
    PROSITE; PS00963; RIBOSOMAL S2 2; PARTIAL.
DR
KW
     Ribosomal protein; Chloroplast.
FT
    NON TER
                 11
                        11
SO
    SEQUENCE 11 AA; 1497 MW; 76CD719954536B44 CRC64;
 Query Match
                         18.2%; Score 2; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1.3e+04;
            2; Conservative 0; Mismatches 0; Indels 0; Gaps
 Matches
        9 RR 10
Qy
             - 1 1
           3 RR 4
Db
RESULT 14
RS30 ONCMY
ID
    RS30 ONCMY
                   STANDARD;
                                  PRT;
    P83328;
AC
DT
     28-FEB-2003 (Rel. 41, Created)
     28-FEB-2003 (Rel. 41, Last sequence update)
DΤ
     10-OCT-2003 (Rel. 42, Last annotation update)
     40S ribosomal protein S30 (Fragment).
GN
OS
    Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC
OC
     Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OX
    NCBI TaxID=8022;
RN
     [1]
RP
     SEQUENCE, FUNCTION, AND MASS SPECTROMETRY.
RC
    TISSUE=Skin mucus;
    MEDLINE=22142142; PubMed=12147245;
RX
     Fernandes J.M.O., Smith V.J.;
RA
RT
     "A novel antimicrobial function for a ribosomal peptide from rainbow
    trout skin.";
RT
RL
     Biochem. Biophys. Res. Commun. 296:167-171(2002).
CC
     -!- FUNCTION: Has antibacterial activity against Gram-positive
CC
        bacteria.
CC
     -!- MASS SPECTROMETRY: MW=6676.6; METHOD=MALDI.
CC
     -!- SIMILARITY: Belongs to the S30E family of ribosomal proteins.
KW
     Ribosomal protein; Antibiotic.
FT
     NON TER
                 11
                        11
     SEQUENCE
               11 AA; 1123 MW; 2312AB630DD735B8 CRC64;
SQ
```

```
Query Match
                          18.2%; Score 2; DB 1; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
                                                                  0; Gaps
                                                                              0;
            2; Conservative
                               0; Mismatches
                                                   0; Indels
            1 AR 2
Qу
              \perp1
Db
            7 AR 8
RESULT 15
TIN1 HOPTI
     TIN1 HOPTI
                                   PRT;
                                           11 AA.
ID
                    STANDARD;
     P82651;
AC
DT
     16-OCT-2001 (Rel. 40, Created)
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     Tigerinin-1.
DE
OS
     Hoplobatrachus tigerinus (Indian bull frog) (Rana tigerina).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae;
OC
     Hoplobatrachus.
OX
     NCBI TaxID=103373;
RN
     SEQUENCE, FUNCTION, MASS SPECTROMETRY, AND DISULFIDE BONDS.
RP
RC
     TISSUE=Skin secretion;
     PubMed=11031261;
RX
     Purna Sai K., Jaganadham M.V., Vairamani M., Raju N.P.,
RA
     Devi A.S., Nagaraj R., Sitaram N.;
RA
     "Tigerinins: novel antimicrobial peptides from the Indian frog Rana
RT
RT
     tigerina.";
     J. Biol. Chem. 276:2701-2707(2001).
RL
     -!- FUNCTION: Antibacterial activity against B.subtilis, E.coli,
CC
CC
         S.aureus, M.luteus, P.putida and S.cerevisiae.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- MASS SPECTROMETRY: MW=1342; METHOD=MALDI.
CC
     Amphibian defense peptide; Antibiotic; Fungicide; Amidation.
KW
FT
     DISULFID
                   2
                         10
     MOD RES
                                  AMIDATION.
FT
                  11
                         11
     SEQUENCE
                11 AA; 1344 MW; A2087DC960476056 CRC64;
SQ
  Query Match
                          18.2%; Score 2; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
  Matches
            2; Conservative
                                 0: Mismatches
                                                                  0; Gaps
                                                                              0;
                                                   0; Indels
            5 TM 6
Qy
              11
            3 TM 4
Db
RESULT 16
TKN2 UPERU
     TKN2 UPERU
                                   PRT;
                                           11 AA.
                    STANDARD;
ΙD
AC
     P08616;
DΤ
     01-AUG-1988 (Rel. 08, Created)
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
```

```
DE
     Rugosauperolein II ([Lys5, Thr6]physalaemin).
OS
     Uperoleia rugosa (Wrinkled toadlet).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
OC
     Myobatrachinae; Uperoleia.
OX
     NCBI TaxID=8368;
RN
     [1]
     SEQUENCE.
RP
RC
     TISSUE=Skin secretion;
RX
     MEDLINE=80223080; PubMed=7389029;
     Nakajima T., Yasuhara T., Erspamer V., Erspamer G.F., Negri L.;
RΆ
     "Physalaemin- and bombesin-like peptides in the skin of the
RT
RT
     Australian leptodactylid frog Uperoleia rugosa.";
RL
     Chem. Pharm. Bull. 28:689-695(1980).
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
KW
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
     Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
     MOD RES
                          1
FT
                   1
     MOD RES
                                  AMIDATION.
FT
                  11
                         11
     SEQUENCE
                                  3293693E59D1A327 CRC64;
SO
                11 AA; 1270 MW;
  Query Match
                          18.2%;
                                  Score 2; DB 1; Length 11;
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                    0;
                                                                               0;
  Matches
             2; Conservative
                                 0; Mismatches
                                                       Indels
                                                                  0;
                                                                      Gaps
            4 KT 5
Qy
              11
            5 KT 6
Db
RESULT 17
TKNA CHICK
     TKNA CHICK
                    STANDARD;
                                   PRT;
                                            11 AA.
AC
     P19850;
     01-FEB-1991 (Rel. 17, Created)
DT
     01-FEB-1991 (Rel. 17, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Substance P.
DE
OS
     Gallus gallus (Chicken).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
OC
     Gallus.
     NCBI TaxID=9031;
OX
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Intestine;
     MEDLINE=88204263; PubMed=2452461;
RX
     Conlon J.M., Katsoulis S., Schmidt W.E., Thim L.;
RA
```

```
RT
     "[Arg3]substance P and neurokinin A from chicken small intestine.";
RL
     Regul. Pept. 20:171-180(1988).
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; JN0023; JN0023.
DR
DR
     InterPro; IPR002040; Tachy Neurokinin.
     Pfam; PF02202; Tachykinin; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
KW
     Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
FT
     MOD RES
                  11
                        11
                                  AMIDATION.
SO
     SEQUENCE
                11 AA; 1377 MW; 21487FE3C9D6C6C7 CRC64;
  Query Match
                          18.2%; Score 2; DB 1; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
  Matches
            2; Conservative 0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                              0;
Qу
            8 PR 9
             -11
Db
            2 PR 3
RESULT 18
TKNA HORSE
     TKNA HORSE
                    STANDARD;
                                   PRT;
ΙD
                                          11 AA.
AC
     P01290;
DT
     21-JUL-1986 (Rel. 01, Created)
     21-JUL-1986 (Rel. 01, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Substance P.
GN
     TAC1 OR NKNA OR TAC2 OR NKA.
     Equus caballus (Horse), and
OS
     Cavia porcellus (Guinea pig).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
OC
OX
     NCBI TaxID=9796, 10141;
RN
     [1]
     SEQUENCE.
RP
RC
     SPECIES=Horse;
RA
     Studer R.O., Trzeciak A., Lergier W.;
RT
     "Isolation and amino-acid sequence of substance P from horse
     intestine.";
RT
     Helv. Chim. Acta 56:860-866(1973).
RL
RN
     [2]
RP
     SEQUENCE.
RC
     SPECIES=C.porcellus;
RX
     MEDLINE=90044685; PubMed=2478925;
RA
     Murphy R.;
     "Primary amino acid sequence of guinea-pig substance P.";
RT
RL
     Neuropeptides 14:105-110(1989).
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
```

```
CC
    -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
DR
     PIR; A01558; SPHO.
     PIR; A60654; A60654.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
KW
    Tachykinin; Neuropeptide; Amidation; Neurotransmitter.
FT
                  11
                         11
                                  AMIDATION.
     SEQUENCE
SO
                11 AA;
                        1349 MW;
                                  3E757FE3C9D6C6C7 CRC64;
                          18.2%; Score 2; DB 1; Length 11;
 Query Match
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                               0;
 Matches
             2; Conservative
                                 0; Mismatches
                                                    0;
                                                       Indels
                                                                  0; Gaps
Qу
            7 KP 8
              \perp
Db
            3 KP 4
RESULT 19
TKNA RANCA
ID
    TKNA RANCA
                    STANDARD;
                                   PRT;
                                            11 AA.
AC
     P22688;
     01-AUG-1991 (Rel. 19, Created)
DT
     01-AUG-1991 (Rel. 19, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Ranatachykinin A (RTK A).
DE
OS
     Rana catesbeiana (Bull frog).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OC
OX
    NCBI TaxID=8400;
RN
     [1]
     SEQUENCE, AND SYNTHESIS.
RP
    TISSUE=Brain, and Intestine;
RC
RX
    MEDLINE=91254337; PubMed=2043143;
    Kozawa H., Hino J., Minamino N., Kangawa K., Matsuo H.;
RA
     "Isolation of four novel tachykinins from frog (Rana catesbeiana)
RT
RT
    brain and intestine.";
    Biochem. Biophys. Res. Commun. 177:588-595(1991).
RL
RN
     [2]
RP
    SEQUENCE.
RC
    TISSUE=Intestine;
RX
    MEDLINE=94023216; PubMed=8210506;
     Kangawa K., Kozawa H., Hino J., Minamino N., Matsuo H.;
RA
RT
     "Four novel tachykinins in frog (Rana catesbeiana) brain and
RT
     intestine.";
RL
     Regul. Pept. 46:81-88(1993).
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
    -!- SUBCELLULAR LOCATION: Secreted.
    -!- SIMILARITY: Belongs to the tachykinin family.
CC
DR
     PIR; A61033; A61033.
```

```
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
     SMART; SM00203; TK; 1.
DR
DR
     PROSITE; PS00267; TACHYKININ; 1.
KW
     Tachykinin; Neuropeptide; Amidation.
FT
                  11
                         11
                                  AMIDATION.
                11 AA; 1311 MW; 200D60CC59D40AB7 CRC64;
     SEQUENCE
SQ
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1.3e+04;
                                0; Mismatches
  Matches
             2: Conservative
                                                   0;
                                                      Indels
                                                                 0;
                                                                     Gaps
                                                                              0;
            7 KP 8
Qу
              11
            1 KP 2
Db
RESULT 20
TKNA RANRI
ID
     TKNA RANRI
                    STANDARD;
                                   PRT;
                                           11 AA.
AC
     P29207;
     01-DEC-1992 (Rel. 24, Created)
DT
     01-DEC-1992 (Rel. 24, Last sequence update)
DT
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
     Ranakinin (Substance-P-related peptide).
DE
     Rana ridibunda (Laughing frog) (Marsh frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OC
     NCBI TaxID=8406;
OX
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Brain;
RX
     MEDLINE=92044543; PubMed=1658233;
     O'Harte F., Burcher E., Lovas S., Smith D.D., Vaudry H., Conlon J.M.;
RA
     "Ranakinin: a novel NK1 tachykinin receptor agonist isolated with
RT
     neurokinin B from the brain of the frog Rana ridibunda.";
RT
     J. Neurochem. 57:2086-2091(1991).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
DR
     PROSITE; PS00267; TACHYKININ; 1.
KW
     Tachykinin; Neuropeptide; Amidation.
FΤ
     MOD RES
                  11
                         11
                                  AMIDATION.
     SEQUENCE
                                 3A2460CC59D40B07 CRC64;
SQ
                11 AA; 1352 MW;
                          18.2%; Score 2; DB 1; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
             2; Conservative 0; Mismatches
                                                 0; Indels
                                                                 0;
  Matches
                                                                     Gaps
                                                                              0;
```

DR

InterPro; IPR002040; Tachy Neurokinin.

```
7 KP 8
Qу
              \perp
            1 KP 2
Db
RESULT 21
TKND RANCA
ID
     TKND RANCA
                    STANDARD;
                                   PRT;
                                           11 AA.
AC
     P22691;
DT
     01-AUG-1991 (Rel. 19, Created)
     01-AUG-1991 (Rel. 19, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Ranatachykinin D (RTK D).
DE
OS
     Rana catesbeiana (Bull frog).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
OX
     NCBI TaxID=8400;
RN
     [1]
RΡ
     SEQUENCE, AND SYNTHESIS.
RC
     TISSUE=Intestine;
RX.
     MEDLINE=91254337; PubMed=2043143;
RA
     Kozawa H., Hino J., Minamino N., Kangawa K., Matsuo H.;
     "Isolation of four novel tachykinins from frog (Rana catesbeiana)
RT
RТ
     brain and intestine.";
RL
     Biochem. Biophys. Res. Commun. 177:588-595(1991).
RN
     [2]
     SEQUENCE.
RP
RC
     TISSUE=Intestine;
     MEDLINE=94023216; PubMed=8210506;
RX
RA
     Kangawa K., Kozawa H., Hino J., Minamino N., Matsuo H.;
RT
     "Four novel tachykinins in frog (Rana catesbeiana) brain and
RT
     intestine.";
RL
     Regul. Pept. 46:81-88(1993).
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; D61033; D61033.
DR
DR
     InterPro; IPR002040; Tachy Neurokinin.
     PROSITE; PS00267; TACHYKININ; FALSE NEG.
DR
KW
     Tachykinin; Neuropeptide; Amidation.
     MOD RES
FT
                  11
                         11
                                  AMIDATION.
     SEQUENCE
                11 AA; 1350 MW;
                                  3A34256C59D40B07 CRC64;
SO
  Query Match
                          18.2%; Score 2; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1.3e+04;
             2; Conservative 0; Mismatches
  Matches
                                                   0; Indels
                                                                  0;
                                                                      Gaps
                                                                               0;
            7 KP 8
Qy
              Db
            1 KP 2
```

RESULT 22 UXB2 YEAST

```
11 AA.
ID
     UXB2 YEAST
                    STANDARD;
                                    PRT;
AC
     P99013;
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     Unknown protein from 2D-page (Spot 2D-000K2F) (Fragment).
DE
     Saccharomyces cerevisiae (Baker's yeast).
OS
     Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
OC
     Saccharomycetales; Saccharomycetaceae; Saccharomyces.
OC
OX
     NCBI TaxID=4932;
RN
     [1]
     SEQUENCE.
RP
RC
     STRAIN=X2180-1A;
RA
     Sanchez J.-C., Golaz O., Schaller D., Morch F., Frutiger S.,
     Hughes G.J., Appel R.D., Deshusses J., Hochstrasser D.F.;
RA
     Submitted (AUG-1995) to Swiss-Prot.
RL
     -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown
CC
         protein is: 6.20, its MW is: 9.2 kDa.
CC
     SWISS-2DPAGE; P99013; YEAST.
DR
FT
     NON TER
                  11
                         11
                       1328 MW; EC38021C0DCB42DA CRC64;
SQ
     SEQUENCE
                11 AA;
  Query Match
                           18.2%; Score 2;
                                            DB 1; Length 11;
                          100.0%; Pred. No. 1.3e+04;
  Best Local Similarity
                                                                               0;
                                  0; Mismatches
                                                    0;
                                                        Indels
                                                                   0; Gaps
  Matches
             2; Conservative
            1 AR 2
Qу
              11
            7 AR 8
Db
RESULT 23
ANGT CRIGE
                                    PRT;
                                            11 AA.
     ANGT CRIGE
                    STANDARD;
AC
     P09037;
     01-NOV-1988 (Rel. 09, Created)
DT
     01-NOV-1988 (Rel. 09, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Crinia-angiotensin II.
DΕ
     Crinia georgiana (Quacking frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
OC
     Myobatrachinae; Crinia.
OX
     NCBI TaxID=8374;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Skin secretion;
     MEDLINE=80024575; PubMed=488254;
RX
     Erspamer V., Melchiorri P., Nakajima T., Yasuhara T., Endean R.;
RA
     "Amino acid composition and sequence of crinia-angiotensin, an
RT
RT
     angiotensin II-like endecapeptide from the skin of the Australian
     frog Crinia georgiana.";
RT
     Experientia 35:1132-1133(1979).
RL
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Skin.
CC
     PIR; S07207; S07207.
DR
KW
     Vasoconstrictor.
```

```
9.1%; Score 1; DB 1; Length 11;
 Query Match
                          100.0%; Pred. No. 1e+05;
 Best Local Similarity
                                                                             0;
                                                                 0; Gaps
            1; Conservative 0; Mismatches 0; Indels
            1 A 1
Qу
            1 A 1
Db
RESULT 24
ASL1 BACSE
     ASL1 BACSE
                    STANDARD;
                                   PRT:
                                           11 AA.
ID
AC
     P83146;
     28-FEB-2003 (Rel. 41, Created)
DT
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DE
     Acharan sulfate lyase 1 (EC 4.2.2.-) (Fragment).
OS
     Bacteroides stercoris.
OC
     Bacteria; Bacteroidetes; Bacteroides (class); Bacteroidales;
OC
     Bacteroidaceae; Bacteroides.
OX
     NCBI TaxID=46506;
RN
     SEQUENCE, FUNCTION, ENZYME REGULATION, AND SUBUNIT.
RP
RC
     STRAIN=HJ-15;
     MEDLINE=21223019; PubMed=11322884;
RX
     Kim B.-T., Hong S.-W., Kim W.-S., Kim Y.S., Kim D.-H.;
RA
     "Purification and characterization of acharan sulfate lyases, two
RT
     novel heparinases, from Bacteroides stercoris HJ-15.";
RT
     Eur. J. Biochem. 268:2635-2641(2001).
RL
     -!- FUNCTION: Degrades acharan sulfate and, to a lesser extent,
CC
         heparin and heparan sulfate.
CC
     -!- ENZYME REGULATION: Inhibited by cupric ion, nitrogen and cobalt.
CC
         Activated by reducing agents, such as DL-dithiothreitol and 2-
CC
         mercaptoethanol.
CC
     -!- SUBUNIT: Monomer.
CC
     -!- PTM: The N-terminus is blocked.
CC
     -!- MISCELLANEOUS: Has an isoelectric point of 8.6. Its optimum pH is
CC
         7.2 and optimum temperature 45 degrees Celsius.
CC
     Lyase; Heparin-binding.
KW
FT
     NON TER
                  1
                          1
     NON TER
                  11
                         11
FT
                11 AA; 1395 MW; 01B2DAA241E865AB CRC64;
     SEOUENCE
SO
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                        100.0%; Pred. No. 1e+05;
  Best Local Similarity
            1; Conservative
                                0; Mismatches
                                                  0; Indels
                                                                 0; Gaps
                                                                              0;
 Matches
            3 Q 3
Qу
           11 Q 11
Db
RESULT 25
ASL2 BACSE
                                   PRT;
                                           11 AA.
                    STANDARD;
     ASL2 BACSE
```

11 AA; 1271 MW; 8A0921F7DB50440A CRC64;

SO

SEQUENCE

```
AC
     P83147;
DT
     28-FEB-2003 (Rel. 41, Created)
     28-FEB-2003 (Rel. 41, Last sequence update)
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
    Acharan sulfate lyase 2 (EC 4.2.2.-) (Fragment).
DE
OS
     Bacteroides stercoris.
OC
    Bacteria; Bacteroidetes; Bacteroides (class); Bacteroidales;
OC
    Bacteroidaceae; Bacteroides.
ΟX
    NCBI TaxID=46506;
RN
     [1]
RP
     SEQUENCE, FUNCTION, ENZYME REGULATION, AND SUBUNIT.
RC
     STRAIN=HJ-15;
RX
    MEDLINE=21223019; PubMed=11322884;
RA
     Kim B.-T., Hong S.-W., Kim W.-S., Kim Y.S., Kim D.-H.;
RT
     "Purification and characterization of acharan sulfate lyases, two
RT
     novel heparinases, from Bacteroides stercoris HJ-15.";
RL
     Eur. J. Biochem. 268:2635-2641(2001).
CC
     -!- FUNCTION: Degrades acharan sulfate and, to a lesser extent,
CC
         heparin and heparan sulfate.
CC
     -!- ENZYME REGULATION: Inhibited by cupric ion, nitrogen and lead.
CC
        Activated by reducing agents, such as DL-dithiothreitol and 2-
CC
         mercaptoethanol.
CC
     -!- SUBUNIT: Monomer.
CC
     -!- PTM: The N-terminus is blocked.
     -!- MISCELLANEOUS: Has an isoelectric point of 8.6. Its optimum pH is
CC
CC
         7.2 and optimum temperature 45 degrees Celsius.
KW
     Lyase; Heparin-binding.
    NON TER
FT
                   1
    NON TER
FT
                  11
                         11
SO
     SEQUENCE
                11 AA; 1195 MW; D79D897C7AA451AD CRC64;
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
            1; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                      Gaps
                                                                               0;
            5 T 5
Qу
              1
            1 T 1
Db
RESULT 26
BPP AGKHP
     BPP AGKHP
                    STANDARD;
                                   PRT;
                                            11 AA.
AC
     P04562;
     13-AUG-1987 (Rel. 05, Created)
DT
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Bradykinin-potentiating peptide (Angiotensin-converting
DE
DE
     enzyme inhibitor).
OS
     Agkistrodon halys pallas (Chinese water mocassin) (Gloydius halys
     pallas).
OS
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC
     Viperidae; Crotalinae; Gloydius.
OX
     NCBI TaxID=8714;
RN
     [1]
RP
     SEQUENCE.
```

```
RC
     TISSUE=Venom;
RX
     MEDLINE=86177022; PubMed=3008123;
     Chi C.-W., Wang S.-Z., Xu L.-G., Wang M.-Y., Lo S.-S., Huang W.-D.;
RA
     "Structure-function studies on the bradykinin potentiating peptide
RT
     from Chinese snake venom (Agkistrodon halys pallas).";
RT
     Peptides 6 Suppl. 3:339-342(1985).
RL
     -!- FUNCTION: This peptide both inhibits the activity of the
CC
         angiotensin-converting enzyme and enhances the action of
CC
         bradykinin by inhibiting the kinases that inactivate it.
CC
         It acts as an indirect hypotensive agent.
CC
     PIR; JC0002; XAVIBH.
DR
     Hypotensive agent; Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                          1
     SEQUENCE
                11 AA; 1112 MW; 30BABF1277686777 CRC64;
SO
                           9.1%; Score 1; DB 1; Length 11;
  Ouery Match
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
             1; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
                                                                              0;
            3 Q 3
Qу
            1 Q 1
Db
RESULT 27
BRK MEGFL
                                    PRT;
                                            11 AA.
     BRK MEGFL
                    STANDARD;
ΙD
AC
     P12797;
     01-OCT-1989 (Rel. 12, Created)
DT
     01-OCT-1989 (Rel. 12, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Megascoliakinin ([Thr6]bradykinin-Lys-Ala) [Contains: Bradykinin-like
DE
DE
     peptide ([Thr6]bradykinin)].
     Megascolia flavifrons (Garden dagger wasp) (Solitary wasp).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Vespoidea;
OC
OC
     Scoliidae; Megascolia.
OX
     NCBI TaxID=7437;
RN
     [1]
     SEQUENCE.
RP
RC
     TISSUE=Venom;
     MEDLINE=87293024; PubMed=3617088;
RX
     Yasuhara T., Mantel P., Nakajima T., Piek T.;
RA
     "Two kinins isolated from an extract of the venom reservoirs of the
RT
     solitary wasp Megascolia flavifrons.";
RT
RL
     Toxicon 25:527-535(1987).
RN
     [2]
RP
     SEQUENCE.
RC
     TISSUE=Venom;
     Nakajima T., Piek T., Yashuara T., Mantel P.;
RA
     "Two kinins isolated from the venom of Megascolia flavifrons.";
RT
     Toxicon 26:34-34(1988).
RL
     -!- FUNCTION: Both proteins have bradykinin-like, although lower
CC
         activities (e.g. smooth muscle contraction).
CC
     -!- SUBCELLULAR LOCATION: Secreted; wasp venom reservoirs.
CC
     -!- SIMILARITY: Belongs to the bradykinin family.
CC
DR
     PIR; B26744; B26744.
```

```
GO; GO:0005615; C:extracellular space; IDA.
DR
    GO; GO:0045776; P:negative regulation of blood pressure; ISS.
DR
    GO; GO:0045987; P:positive regulation of smooth muscle contra. . .; TAS.
DR
     Bradykinin; Vasodilator.
KW
     PEPTIDE
                                  MEGASCOLIAKININ.
FT
                   1
     PEPTIDE
                                  BRADYKININ-LIKE PEPTIDE.
FT
                   1
                11 AA; 1273 MW;
                                  33867393D771A9C8 CRC64;
SO
    SEQUENCE
                           9.1%; Score 1;
                                            DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1e+05;
  Best Local Similarity
                                0; Mismatches
                                                  0; Indels
                                                                  0; Gaps
                                                                              0;
 Matches
            1; Conservative
            2 R 2
Qу
              Т
Db
            1 R 1
RESULT 28
CA21 LITCI
     CA21 LITCI
                    STANDARD;
                                   PRT;
                                           11 AA.
ΙD
     P82087;
AC
DT
     16-OCT-2001 (Rel. 40, Created)
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
     Caerulein 2.1/2.1Y4.
DE
     Litoria citropa (Australian blue mountains tree frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
OC
     Pelodryadinae; Litoria.
OX
     NCBI TaxID=94770;
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
RC
     TISSUE=Skin secretion;
    MEDLINE=20057701; PubMed=10589099;
RX
     Wabnitz P.A., Bowie J.H., Tyler M.J.;
RA
     "Caerulein-like peptides from the skin glands of the Australian blue
RT
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
RL
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
     -!- PTM: Isoform 2.1Y4 differs from isoform 2.1 in not being
CC
CC
         sulfated.
     -!- MASS SPECTROMETRY: MW=1372; METHOD=Electrospray.
CC
CC
     -!- SIMILARITY: Belongs to the qastrin/cholecystokinin family.
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE NEG.
DR
     Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
     Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                          1
     MOD RES
                                  SULFATION.
                   4
                          4
FT
                                  AMIDATION.
FT
     MOD RES
                  11
                         11
                11 AA; 1312 MW; 10DAB7C4EDD861BB CRC64;
SQ
     SEQUENCE
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1e+05;
```

```
3 Q 3
QУ
            1 Q 1
Db
RESULT 29
CA22 LITCI
     CA22 LITCI
                    STANDARD;
                                   PRT;
                                           11 AA.
ID
     P82088;
AC
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Caerulein 2.2/2.2Y4.
DE
     Litoria citropa (Australian blue mountains tree frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
     Pelodryadinae; Litoria.
OX
     NCBI TaxID=94770;
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
RC
     TISSUE=Skin secretion;
     MEDLINE=20057701; PubMed=10589099;
RX
RA
     Wabnitz P.A., Bowie J.H., Tyler M.J.;
     "Caerulein-like peptides from the skin glands of the Australian blue
RT
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
RL
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
     -!- PTM: Isoform 2.2Y4 differs from isoform 2.2 in not being
CC
CC
     -!- MASS SPECTROMETRY: MW=1388; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE NEG.
DR
     Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
     Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
     MOD RES
FT
                   1
                         1
     MOD RES
                   4
                          4
                                  SULFATION.
FT
                11
     MOD RES
                         11
                                  AMIDATION.
FΤ
                11 AA; 1328 MW; 10DAB894EDD861BB CRC64;
     SEOUENCE
SO
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1e+05;
                                                                  0; Gaps
                                                                              0;
             1; Conservative
                                0; Mismatches
                                                    0; Indels
            3 Q 3
Qу
            1 Q 1
Db
RESULT 30
CA31 LITCI
                                   PRT;
                                           11 AA.
ID CA31 LITCI
                    STANDARD;
```

1; Conservative 0; Mismatches

Matches

0;

0; Gaps

0; Indels

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AC
     P82089;
DT
     16-OCT-2001 (Rel. 40, Created)
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Caerulein 3.1/3.1Y4.
DΕ
OS
    Litoria citropa (Australian blue mountains tree frog).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
     Pelodryadinae; Litoria.
OC
    NCBI TaxID=94770;
OX
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
     TISSUE=Skin secretion;
RC
RX
    MEDLINE=20057701; PubMed=10589099;
    Wabnitz P.A., Bowie J.H., Tyler M.J.;
RA
     "Caerulein-like peptides from the skin glands of the Australian blue
RT
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
RL
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
     -!- PTM: Isoform 3.1Y4 differs from isoform 3.1 in not being
CC
CC
         sulfated.
     -!- MASS SPECTROMETRY: MW=1407; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE NEG.
DR
     Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
     Pyrrolidone carboxylic acid.
KW
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                   1
                          1
     MOD RES
                   4
                          4
                                  SULFATION.
FT
                         11
                                  AMIDATION.
     MOD RES
                  11
FT
                11 AA; 1347 MW; 10DAB7D67861A86B CRC64;
     SEQUENCE
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1e+05;
  Best Local Similarity
                                                                               0;
                               0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
  Matches
             1; Conservative
            3 Q 3
Qу
Db
            1 Q 1
RESULT 31
CA32 LITCI
     CA32 LITCI
                    STANDARD;
                                   PRT;
                                            11 AA.
ID
     P82090;
AC
DT
     16-OCT-2001 (Rel. 40, Created)
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
     Caerulein 3.2/3.2Y4.
DΕ
     Litoria citropa (Australian blue mountains tree frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
     Pelodryadinae; Litoria.
OC
OX
     NCBI TaxID=94770;
```

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RN
     [1]
RP
     SEQUENCE, AND MASS SPECTROMETRY.
     TISSUE=Skin secretion;
RC
    MEDLINE=20057701; PubMed=10589099;
RX
    Wabnitz P.A., Bowie J.H., Tyler M.J.;
RA
RT
     "Caerulein-like peptides from the skin glands of the Australian blue
    montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
RL
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
CC
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
     -!- PTM: Isoform 3.2Y4 differs from isoform 3.2 in not being
CC
         sulfated.
CC
     -!- MASS SPECTROMETRY: MW=1423; METHOD=Electrospray.
CC
    -!- SIMILARITY: Belongs to the qastrin/cholecystokinin family.
DR
    InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE NEG.
KW
    Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
     Pyrrolidone carboxylic acid.
FT
    MOD RES
                   1
                          1
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
    MOD RES
                   4
                          4
                                  SULFATION.
FT
    MOD RES
                  11
                         11
                                  AMIDATION.
     SEQUENCE
                11 AA; 1363 MW;
                                  10DAB8867861A86B CRC64;
SQ
  Query Match
                           9.1%;
                                  Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
                                 0; Mismatches
                                                  0; Indels
                                                                  0;
                                                                      Gaps
                                                                               0;
  Matches
             1; Conservative
            3 Q 3
Qу
Db
            1 Q 1
RESULT 32
CA41 LITCI
     CA41 LITCI
                                            11 AA.
                    STANDARD;
                                   PRT;
ID
     P82091;
AC
DT
     16-OCT-2001 (Rel. 40, Created)
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Caerulein 4.1/4.1Y4.
     Litoria citropa (Australian blue mountains tree frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
OC
     Pelodryadinae; Litoria.
OX
     NCBI TaxID=94770;
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
RC
     TISSUE=Skin secretion;
RX
     MEDLINE=20057701; PubMed=10589099;
RA
     Wabnitz P.A., Bowie J.H., Tyler M.J.;
RT
     "Caerulein-like peptides from the skin glands of the Australian blue
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
RT
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
RL
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
```

```
-!- SUBCELLULAR LOCATION: Secreted.
CC
CC
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
     -!- PTM: Isoform 4.1Y4 differs from isoform 4.1 in not being
CC
         sulfated.
     -!- MASS SPECTROMETRY: MW=1388; METHOD=Electrospray.
CC
CC
     -!- SIMILARITY: Belongs to the qastrin/cholecystokinin family.
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE NEG.
DR
KW
     Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
     Pyrrolidone carboxylic acid.
                                   PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                    1
                           1
     MOD RES
                    4
FT
                           4
                                   SULFATION.
     MOD RES
FT
                   11
                          11
                                   AMIDATION.
SO
     SEOUENCE
                11 AA; 1328 MW;
                                  10DAB7C4F5B861BB CRC64;
  Query Match
                            9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                           100.0%; Pred. No. 1e+05;
             1; Conservative
                                  0; Mismatches
                                                     0; Indels
                                                                    0; Gaps
                                                                                0;
            3 Q 3
Qy
Db
            1 Q 1
RESULT 33
CA42 LITCI
     CA42 LITCI
                                    PRT;
                                             11 AA.
ID
                     STANDARD;
AC
     P82092;
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update) 10-OCT-2003 (Rel. 42, Last annotation update)
DT
DT
     Caerulein 4.2/4.2Y4.
DE
     Litoria citropa (Australian blue mountains tree frog).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
     Pelodryadinae; Litoria.
OC
XO.
     NCBI TaxID=94770;
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
     TISSUE=Skin secretion;
RC
RX
     MEDLINE=20057701; PubMed=10589099;
     Wabnitz P.A., Bowie J.H., Tyler M.J.;
RA
     "Caerulein-like peptides from the skin glands of the Australian blue
RT
RT
     montains tree frog Litoria citropa. Part 1. Sequence determination
RT
     using electrospray mass spectrometry.";
     Rapid Commun. Mass Spectrom. 13:2498-2502(1999).
RL
CC
     -!- FUNCTION: Hypotensive neuropeptide (Probable).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
CC
     -!- PTM: Isoform 4.2Y4 differs from isoform 4.2 in not being
CC
         sulfated.
CC
     -!- MASS SPECTROMETRY: MW=1404; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
DR
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; FALSE NEG.
     Amphibian defense peptide; Hypotensive agent; Amidation; Sulfation;
KW
KW
     Pyrrolidone carboxylic acid.
```

```
MOD RES
                  4
FT
                         4
                                 SULFATION.
    MOD RES
                 11
                        11
FT
                                 AMIDATION.
    SEQUENCE
                11 AA; 1344 MW; 10DAB894F5B861BB CRC64;
SQ
 Query Match
                          9.1%; Score 1; DB 1; Length 11;
                         100.0%; Pred. No. 1e+05;
 Best Local Similarity
                              0; Mismatches 0; Indels
                                                                            0;
 Matches
          1; Conservative
                                                                 0; Gaps
Qy
            3 Q 3
             -
Db
           1 Q 1
RESULT 34
CEP1 ACHFU
    CEP1 ACHFU
                   STANDARD;
                                  PRT;
                                          11 AA.
AC
    P22790;
DT
    01-AUG-1991 (Rel. 19, Created)
     01-AUG-1991 (Rel. 19, Last sequence update)
DT
     01-DEC-1992 (Rel. 24, Last annotation update)
DT
DE
    Cardio-excitatory peptide-1 (ACEP-1).
    Achatina fulica (Giant African snail).
OS
OC
    Eukaryota; Metazoa; Mollusca; Gastropoda; Pulmonata; Stylommatophora;
     Sigmurethra; Achatinoidea; Achatinidae; Achatina.
OC
OX
    NCBI TaxID=6530;
RN
    [1]
RP
    SEQUENCE.
     STRAIN=Ferussac; TISSUE=Heart atrium;
RC
    MEDLINE=90211261; PubMed=2322251;
RX
    Fujimoto K., Ohta N., Yoshida M., Kubota I., Muneoka Y., Kobayashi M.;
RA
     "A novel cardio-excitatory peptide isolated from the atria of the
RT
    African giant snail, Achatina fulica.";
RT
     Biochem. Biophys. Res. Commun. 167:777-783(1990).
RL
CC
     -!- FUNCTION: Potentiates the beat of the ventricle, and has also
CC
         excitatory actions on the penis retractor muscle, the buccal
CC
        muscle and the identified neurons controlling the buccal muscle
        movement of achatina.
CC
     -!- SIMILARITY: TO POSSIBLE PEPTIDE L5 FROM APLYSIA.
CC
     PIR; A34662; A34662.
DR
KW
    Hormone; Amidation.
FT
    MOD RES
                                 AMIDATION.
                 11
                        11
     SEQUENCE
               11 AA; 1305 MW; 82D6D5B9C7741365 CRC64;
SQ
                          9.1%; Score 1; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1e+05;
                                                                0; Gaps
           1; Conservative 0; Mismatches 0; Indels
 Matches
                                                                            0;
            3 Q 3
Qу
           3 Q 3
RESULT 35
CORZ PERAM
    CORZ PERAM
                   STANDARD;
                                  PRT;
                                          11 AA.
ID
     P11496;
AC
```

PYRROLIDONE CARBOXYLIC ACID.

MOD RES

. 1

1

FT

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DT
     01-OCT-1989 (Rel. 12, Created)
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Corazonin.
os
     Periplaneta americana (American cockroach).
OC
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blattoidea;
OC
OC
     Blattidae; Periplaneta.
OX
     NCBI TaxID=6978;
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Corpora cardiaca;
RC
RX
     MEDLINE=89325572; PubMed=2753132;
RA
     Veenstra J.A.:
RT
     "Isolation and structure of corazonin, a cardioactive peptide from
RT
     the American cockroach.";
RL
     FEBS Lett. 250:231-234(1989).
CC
     -!- FUNCTION: Cardioactive peptide. Corazonin is probably involved
CC
         in the physiological regulation of the heart beat.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
DR
     PIR; S05002; S05002.
KW
     Neuropeptide; Amidation; Pyrrolidone carboxylic acid.
     MOD RES
FT
                   1
                          1
                                   PYRROLIDONE CARBOXYLIC ACID.
     MOD RES
FT
                  11
                         11
                                   AMIDATION.
     SEQUENCE
                11 AA;
                        1387 MW;
                                  C7CFF32D6415AB46 CRC64;
SQ
  Query Match
                            9.1%;
                                  Score 1;
                                             DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
                                                                               0;
  Matches
                                 0; Mismatches
                                                    0; Indels
                                                                   0;
                                                                       Gaps
             1; Conservative
            3 Q 3
Qy
Db
            1 Q 1
RESULT 36
COXA CANFA
     COXA CANFA
                                    PRT;
                    STANDARD;
                                            11 AA.
ID
     P99501;
AC
DT
     15-JUL-1998 (Rel. 36, Created)
DT
     15-JUL-1998 (Rel. 36, Last sequence update)
     30-MAY-2000 (Rel. 39, Last annotation update)
DT
     Cytochrome c oxidase polypeptide Va (EC 1.9.3.1) (Fragment).
DΕ
     COX5A.
GN
OS
     Canis familiaris (Dog).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OC
OX
     NCBI TaxID=9615;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Heart;
RX
     MEDLINE=98163340; PubMed=9504812;
RA
     Dunn M.J., Corbett J.M., Wheeler C.H.;
     "HSC-2DPAGE and the two-dimensional gel electrophoresis database of
RT
RT
     dog heart proteins.";
     Electrophoresis 18:2795-2802(1997).
RL
CC
     -!- FUNCTION: This is the heme A-containing chain of cytochrome c
```

```
oxidase, the terminal oxidase in mitochondrial electron transport.
CC
CC
    -!- CATALYTIC ACTIVITY: 4 ferrocytochrome c + O(2) = 4 ferricytochrome
CC
         c + 2 H(2)0.
CC
    -!- SUBCELLULAR LOCATION: Mitochondrial inner membrane.
    -!- SIMILARITY: Belongs to the cytochrome c oxidase Va family.
CC
DR
    HSC-2DPAGE; P99501; DOG.
    InterPro; IPR003204; Cyt c ox5A.
DR
    Pfam; PF02284; COX5A; 1.
DR
KW
    Oxidoreductase; Heme; Mitochondrion; Inner membrane.
FT
    NON TER
                  11
                         11
    SEQUENCE
SQ
                11 AA; 1274 MW;
                                  910B35C5B1AB11F5 CRC64;
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
 Matches
            1; Conservative
                               0; Mismatches
                                                   0: Indels
                                                                  0;
                                                                      Gaps
            5 T 5
Qy
              1
            7 T 7
Db
RESULT 37
CX5A CONAL
     CX5A CONAL
                    STANDARD;
                                   PRT;
                                           11 AA.
ID
     P58848;
AC
DT
     28-FEB-2003 (Rel. 41, Created)
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
DE
    Conotoxin au5a.
     Conus aulicus (Court cone).
OS
     Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC
    Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
OC
    Neogastropoda; Conoidea; Conidae; Conus.
OC
OX
    NCBI TaxID=89437;
RN
     [1]
     SEQUENCE, SYNTHESIS, AND MASS SPECTROMETRY.
RP
RC
     TISSUE=Venom;
    MEDLINE=99452958; PubMed=10521453;
RX
     Walker C.S., Steel D., Jacobsen R.B., Lirazan M.B., Cruz L.J.,
RA
     Hooper D., Shetty R., DelaCruz R.C., Nielsen J.S., Zhou L.M.,
RA
RA
     Bandyopadhyay P., Craig A.G., Olivera B.M.;
RT
     "The T-superfamily of conotoxins.";
     J. Biol. Chem. 274:30664-30671(1999).
RL
RN
     [2]
RP
     ERRATUM.
     Walker C.S., Steel D., Jacobsen R.B., Lirazan M.B., Cruz L.J.,
RA
     Hooper D., Shetty R., DelaCruz R.C., Nielsen J.S., Zhou L.M.,
RA
     Bandyopadhyay P., Craig A.G., Olivera B.M.;
RA
RL
     J. Biol. Chem. 274:36030-36030(1999).
     -!- FUNCTION: Causes dorsal fins drooping in fish. No effect is
CC
CC
         observed when injected into mice.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Expressed by the venom duct.
     -!- MASS SPECTROMETRY: MW=1436.6; METHOD=LSIMS.
CC
CC
     -!- SIMILARITY: Belongs to the conotoxin T-superfamily.
DR
     PIR; A59146; A59146.
KW
     Toxin.
```

```
FT
     DISULFID
FT
     DISULFID
                         10
     SEQUENCE
                11 AA;
                        1441 MW;
                                  21A36775440059D7 CRC64;
SQ
                           9.1%;
                                   Score 1; DB 1;
  Query Match
                                                    Length 11;
                          100.0%;
  Best Local Similarity
                                    Pred. No. 1e+05;
                                  0; Mismatches
                                                                               0;
             1; Conservative
                                                    0;
                                                        Indels
                                                                   0;
                                                                       Gaps
            2 R 2
Qу
            7 R 7
Db
RESULT 38
CX5B CONAL
ID
     CX5B CONAL
                    STANDARD;
                                    PRT:
                                            11 AA.
     P58849;
AC
DT
     28-FEB-2003 (Rel. 41, Created)
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
DE
     Conotoxin au5b.
OS
     Conus aulicus (Court cone).
     Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC
OC
     Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
OC
     Neogastropoda; Conoidea; Conidae; Conus.
OX
     NCBI TaxID=89437;
RN
     [1]
     SEQUENCE, AND MASS SPECTROMETRY.
RP
RC
     TISSUE=Venom;
     MEDLINE=99452958; PubMed=10521453;
RX
     Walker C.S., Steel D., Jacobsen R.B., Lirazan M.B., Cruz L.J.,
RA
     Hooper D., Shetty R., DelaCruz R.C., Nielsen J.S., Zhou L.M.,
RA
RA
     Bandyopadhyay P., Craig A.G., Olivera B.M.;
     "The T-superfamily of conotoxins.";
RT
     J. Biol. Chem. 274:30664-30671(1999).
RL
RN
     [2]
     ERRATUM.
RP
     Walker C.S., Steel D., Jacobsen R.B., Lirazan M.B., Cruz L.J.,
RA
     Hooper D., Shetty R., DelaCruz R.C., Nielsen J.S., Zhou L.M.,
RA
     Bandyopadhyay P., Craig A.G., Olivera B.M.;
RA
     J. Biol. Chem. 274:36030-36030(1999).
RL
     -!- FUNCTION: Causes dorsal fins drooping in fish. No effect is
CC
         observed when injected into mice (By similarity).
CC
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Expressed by the venom duct.
CC
CC
     -!- MASS SPECTROMETRY: MW=1388.6; METHOD=LSIMS.
CC
     -!- SIMILARITY: Belongs to the conotoxin T-superfamily.
DR
     PIR; B59146; B59146.
KW
     Toxin.
                   2
                           9
FT
     DISULFID
     DISULFID
                          10
\mathbf{FT}
                   3
                        1393 MW;
                                   21A36775440042D7 CRC64;
SQ
     SEQUENCE
                11 AA;
  Query Match
                            9.1%; Score 1; DB 1;
                                                    Length 11;
                           100.0%;
                                    Pred. No. 1e+05;
  Best Local Similarity
                                                                                0;
                                 0; Mismatches
                                                    0; Indels
                                                                   0;
                                                                       Gaps
             1;
                 Conservative
```

2

9

```
2 R 2
Qу
            7 R 7
Db
RESULT 39
CXL1 CONMR
     CXL1 CONMR
                    STANDARD;
                                    PRT;
                                            11 AA.
ID
     P58807;
AC
     28-FEB-2003 (Rel. 41, Created)
DT
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Lambda-conotoxin CMrVIA.
DE
     Conus marmoreus (Marble cone).
OS
     Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC
     Apogastropoda; Caenogastropoda; Sorbeoconcha; Hypsogastropoda;
OC
     Neogastropoda; Conoidea; Conidae; Conus.
OC
OX
     NCBI TaxID=42752;
RN
     [1]
RP
     SEQUENCE, SYNTHESIS, AND MASS SPECTROMETRY.
RC
     TISSUE=Venom;
RX
     MEDLINE=20564325; PubMed=10988292;
RA
     Balaji R.A., Ohtake A., Sato K., Gopalakrishnakone P., Kini R.M.,
RA
     Seow K.T., Bay B.-H.;
     "Lambda-conotoxins, a new family of conotoxins with unique disulfide
RT
    pattern and protein folding. Isolation and characterization from the
RT
     venom of Conus marmoreus.";
RT
     J. Biol. Chem. 275:39516-39522(2000).
RL
     -!- FUNCTION: Inhibits the neuronal noradrenaline transporter.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Expressed by the venom duct.
CC
     -!- MASS SPECTROMETRY: MW=1237.93; MW ERR=0.21; METHOD=Electrospray.
CC
     -!- SIMILARITY: Belongs to the chi/lambda-conotoxin family.
CC
     Neurotoxin; Toxin; Hydroxylation.
KW
FT
     DISULFID
                   2
                         11
     DISULFID
                   3
FT
                          8
                  10
                                   HYDROXYLATION.
     MOD RES
                         10
FT
                                   277AAC60B7232B58 CRC64;
SO
     SEQUENCE
                11 AA; 1226 MW;
                                  Score 1; DB 1;
                           9.1%;
                                                    Length 11;
  Query Match
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
                                  0; Mismatches
                                                                      Gaps
                                                                               0;
             1; Conservative
                                                    0; Indels
                                                                   0;
            4 K 4
QУ
Db
            6 K 6
RESULT 40
EFG CLOPA
     EFG CLOPA
                    STANDARD:
                                    PRT;
                                            11 AA.
ID
AC
     P81350;
     15-JUL-1998 (Rel. 36, Created)
DT
     15-JUL-1998 (Rel. 36, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     Elongation factor G (EF-G) (CP 5) (Fragment).
DE
GN
     FUSA.
```

```
OS
     Clostridium pasteurianum.
OC
     Bacteria; Firmicutes; Clostridia; Clostridiales; Clostridiaceae;
OC
     Clostridium.
     NCBI TaxID=1501;
OX
     [1]
RN
RP
     SEQUENCE.
     STRAIN=W5;
RC
     MEDLINE=98291870; PubMed=9629918;
RX
     Flengsrud R., Skjeldal L.;
RA
     "Two-dimensional gel electrophoresis separation and N-terminal
RT
     sequence analysis of proteins from Clostridium pasteurianum W5.";
RT
     Electrophoresis 19:802-806(1998).
RL
CC
     -!- FUNCTION: This protein promotes the GTP-dependent translocation of
         the nascent protein chain from the A-site to the P-site of the
CC
CC
         ribosome.
     -!- SUBCELLULAR LOCATION: Cytoplasmic.
CC
CC
     -!- SIMILARITY: Belongs to the GTP-binding elongation factor family.
CC
         EF-G/EF-2 subfamily.
DR
     InterPro; IPR000795; EF GTPbind.
DR
     PROSITE; PS00301; EFACTOR GTP; PARTIAL.
KW
     Elongation factor; Protein biosynthesis; GTP-binding.
FT
     NON TER
                  11
                         11
                11 AA; 1337 MW; 412E71F1D9C33B17 CRC64;
SQ
     SEQUENCE
  Query Match
                           9.1%; Score 1; DB 1;
                                                    Length 11;
                          100.0%; Pred. No. 1e+05;
  Best Local Similarity
                                                                               0;
             1; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                      Gaps
  Matches
Qу
            4 K 4
Db
            1 K 1
RESULT 41
FAR6 PENMO
     FAR6 PENMO
                    STANDARD;
                                    PRT:
                                            11 AA.
ΙD
AC
     P83321;
DT
     28-FEB-2003 (Rel. 41, Created)
     28-FEB-2003 (Rel. 41, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
     FMRFamide-like neuropeptide FLP6 (DGRTPALRLRF-amide).
DE
     Penaeus monodon (Penoeid shrimp).
OS
     Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
OC
     Eumalacostraca; Eucarida; Decapoda; Dendrobranchiata; Penaeoidea;
OC
OC
     Penaeidae; Penaeus.
     NCBI TaxID=6687;
OX
RN
     [1]
RP
     SEQUENCE, AND MASS SPECTROMETRY.
RC
     TISSUE=Eyestalk;
RX
     MEDLINE=21956277; PubMed=11959015;
RA
     Sithigorngul P., Pupuem J., Krungkasem C., Longyant S.,
     Chaivisuthangkura P., Sithigorngul W., Petsom A.;
RA
     "Seven novel FMRFamide-like neuropeptide sequences from the eyestalk
RT
     of the giant tiger prawn Penaeus monodon.";
RT
     Comp. Biochem. Physiol. 131B:325-337(2002).
RL
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- MASS SPECTROMETRY: MW=1301.8; METHOD=MALDI.
CC
```

```
CC
     -!- SIMILARITY: Belongs to the FARP (FMRFamide related peptide)
CC
         family.
DR
     GO; GO:0007218; P:neuropeptide signaling pathway; TAS.
KW
     Neuropeptide; Amidation.
     MOD RES
FT
                 11
                         11
                                  AMIDATION.
     SEQUENCE
SQ
                11 AA; 1301 MW; 9A19C860072DC771 CRC64;
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
            1; Conservative
                                 0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
            2 R 2
QУ
            3 R 3
RESULT 42
FAR9 CALVO
ID
     FAR9 CALVO
                    STANDARD;
                                   PRT;
                                           11 AA.
AC
     P41864;
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     01-NOV-1995 (Rel. 32, Last annotation update)
DT
DE
     CalliFMRFamide 9.
OS
     Calliphora vomitoria (Blue blowfly).
OC
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
     Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Oestroidea;
OC
OC
     Calliphoridae; Calliphora.
     NCBI TaxID=27454;
OX
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Thoracic ganglion;
     MEDLINE=92196111; PubMed=1549595;
RX
     Duve H., Johnsen A.H., Sewell J.C., Scott A.G., Orchard I.,
RA
RA
     Rehfeld J.F., Thorpe A.;
     "Isolation, structure, and activity of -Phe-Met-Arg-Phe-NH2
RT
     neuropeptides (designated calliFMRFamides) from the blowfly
RT
RT
     Calliphora vomitoria.";
     Proc. Natl. Acad. Sci. U.S.A. 89:2326-2330(1992).
RL
     -!- SIMILARITY: Belongs to the FARP (FMRFamide related peptide)
CC
CC
         family.
DR
     PIR; I41978; I41978.
     Neuropeptide; Amidation.
ΚW
FT
     MOD RES
                  11
                         11
                                  AMIDATION.
     SEQUENCE
                11 AA; 1359 MW; 8160CE46CAA44321 CRC64;
SO
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1e+05;
  Matches
                               0; Mismatches
                                                                              0;
             1; Conservative
                                                   0; Indels
                                                                 0; Gaps
Qу
            2 R 2
Db
           10 R 10
```

RESULT 43 HS70 PINPS

```
ID
     HS70 PINPS
                    STANDARD;
                                    PRT;
                                            11 AA.
AC
     P81672;
DT
     15-JUL-1999 (Rel. 38, Created)
     15-JUL-1999 (Rel. 38, Last sequence update)
DΤ
     15-MAR-2004 (Rel. 43, Last annotation update)
DΤ
DΕ
     Heat shock 70 kDa protein (Fragment).
OS
     Pinus pinaster (Maritime pine).
OC
     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
OC
     Spermatophyta; Coniferopsida; Coniferales; Pinaceae; Pinus.
OX
     NCBI TaxID=71647;
RN
     [1]
     SEQUENCE.
RP
RC
     TISSUE=Needle;
RX
     MEDLINE=99274088; PubMed=10344291;
     Costa P., Pionneau C., Bauw G., Dubos C., Bahrman N., Kremer A.,
RA
     Frigerio J.-M., Plomion C.;
RA
     "Separation and characterization of needle and xylem maritime pine
RT
RT
     proteins.";
RL
     Electrophoresis 20:1098-1108(1999).
CC
     -!- MISCELLANEOUS: On the 2D-gel the determined pI of this protein
CC
         (spot N164) is: 5.4, its MW is: 73 kDa.
CC
     -!- SIMILARITY: Belongs to the heat shock protein 70 family.
KW
     ATP-binding; Heat shock; Multigene family.
FT
     NON TER
                   1
                          1
                  11
FT
     NON TER
                         11
     SEQUENCE
                11 AA; 1228 MW;
                                   037C1BE8DAA44DD0 CRC64;
SQ
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1e+05;
  Best Local Similarity
             1; Conservative
                               0; Mismatches
                                                                               0;
  Matches
                                                    0; Indels
                                                                      Gaps
            1 A 1
Qу
              - 1
            5 A 5
RESULT 44
LADD ONCMY
     LADD ONCMY
ID
                    STANDARD;
                                    PRT;
                                            11 AA.
     P81018;
AC
     01-NOV-1997 (Rel. 35, Created)
DT
     01-NOV-1997 (Rel. 35, Last sequence update)
DT
     15-DEC-1998 (Rel. 37, Last annotation update)
DT
     Ladderlectin (Fragment).
DE
     Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
OS
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Actinopterygii; Neopterygii; Teleostei; Euteleostei;
OC
OC
     Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
OX
     NCBI TaxID=8022;
RN
     [1]
RP
     SEOUENCE.
RC
     TISSUE=Blood;
RX
     MEDLINE=97293418; PubMed=9149391;
RA
     Jensen L.E., Thiel S., Petersen T.E., Jensenuis J.C.;
     "A rainbow trout lectin with multimeric structure.";
RT
     Comp. Biochem. Physiol. 116B:385-390(1997).
RL
     -!- FUNCTION: Lectin that binds sepharose.
CC
```

```
-!- COFACTOR: Calcium is essential for sepharose binding.
CC
    -!- SUBUNIT: Multimeric.
KW
    Lectin; Calcium.
    NON TER
FT
               11
    SEQUENCE
              11 AA; 1163 MW; 0B26227FF6D45404 CRC64;
SO
 Ouerv Match
                         9.1%; Score 1; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1e+05;
           1; Conservative 0; Mismatches 0; Indels
 Matches
                                                                         0;
                                                           0; Gaps
           1 A 1
Qу
             1 A 1
Dh
RESULT 45
LPW THETH
    LPW THETH
                  STANDARD;
                                 PRT;
                                        11 AA.
AC
    P05624;
    01-NOV-1988 (Rel. 09, Created)
DT
DT
    01-NOV-1988 (Rel. 09, Last sequence update)
DT
    30-MAY-2000 (Rel. 39, Last annotation update)
DE
    Trp operon leader peptide.
GN
    TRPL.
OS
    Thermus thermophilus.
OC
    Bacteria; Deinococcus-Thermus; Deinococci; Thermales; Thermaceae;
OC
    Thermus.
OX
    NCBI TaxID=274;
RN
    [1]
RP
    SEQUENCE FROM N.A.
    STRAIN=HB8 / ATCC 27634;
RC
RX
    MEDLINE=89000781; PubMed=2844259;
RA
    Sato S., Nakada Y., Kanaya S., Tanaka T.;
RT
    "Molecular cloning and nucleotide sequence of Thermus thermophilus
RT
    HB8 trpE and trpG.";
    Biochim. Biophys. Acta 950:303-312(1988).
RL
    -!- FUNCTION: THIS PROTEIN IS INVOLVED IN CONTROL OF THE BIOSYNTHESIS
CC
CC
        OF TRYPTOPHAN.
CC
    This SWISS-PROT entry is copyright. It is produced through a collaboration
CC
CC
    between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC
    the European Bioinformatics Institute. There are no restrictions on its
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    use by non-profit institutions as long as its content is in no way
    modified and this statement is not removed. Usage by and for commercial
CC
    entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC
CC
    or send an email to license@isb-sib.ch).
    CC
DR
    EMBL; X07744; CAA30565.1; -.
KW
    Tryptophan biosynthesis; Leader peptide.
              11 AA; 1228 MW; 364B295A772DC5A7 CRC64;
SQ
    SEQUENCE
                         9.1%; Score 1; DB 1; Length 11;
 Query Match
 Best Local Similarity 100.0%; Pred. No. 1e+05;
           1; Conservative 0; Mismatches 0; Indels
 Matches
                                                              0; Gaps
                                                                         0;
           6 M 6
```

1

```
RESULT 46
LSK1 LEUMA
     LSK1 LEUMA
                    STANDARD;
                                    PRT;
                                            11 AA.
ID
     P04428;
AC
     13-AUG-1987 (Rel. 05, Created)
     13-AUG-1987 (Rel. 05, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
     Leucosulfakinin-I (LSK-I).
DE
     Leucophaea maderae (Madeira cockroach).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blaberoidea;
OC
OC
     Blaberidae; Leucophaea.
OX
     NCBI TaxID=6988;
RN
     [1]
RP
     SEQUENCE.
     MEDLINE=86315858; PubMed=3749893;
RX
RA
     Nachman R.J., Holman G.M., Haddon W.F., Ling N.;
RT
     "Leucosulfakinin, a sulfated insect neuropeptide with homology to
     gastrin and cholecystokinin.";
RT
RL
     Science 234:71-73(1986).
     -!- FUNCTION: Change the frequency and amplitude of contractions of
CC
CC
         the hingut. Inhibits muscle contraction of hindgut.
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
DR
     PIR; A01622; GMROL.
DR
     InterPro; IPR001651; Gastrin.
DR
     PROSITE; PS00259; GASTRIN; 1.
     Hormone; Amidation; Sulfation.
KW
     MOD RES
                           6
                                   SULFATION.
FT
                   6
                  11
                                   AMIDATION.
FT
     MOD RES
                         11
                11 AA; 1459 MW; 7E4E0680E86B5AAB CRC64;
SQ
     SEQUENCE
                            9.1%;
                                   Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1e+05;
  Best Local Similarity
                                                                               0;
                                                                   0;
                                                                       Gaps
                                 0; Mismatches
                                                    0; Indels
  Matches
             1; Conservative
            3 Q 3
Qγ
            2 Q 2
Db
RESULT 47
LSKP PERAM
ID
     LSKP PERAM
                     STANDARD;
                                    PRT;
                                            11 AA.
AC
     P36885;
     01-JUN-1994 (Rel. 29, Created)
DT
     01-JUN-1994 (Rel. 29, Last sequence update)
DT
     01-FEB-1996 (Rel. 33, Last annotation update)
DT
     Perisulfakinin (Pea-SK-I).
DE
     Periplaneta americana (American cockroach).
OS
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blattoidea;
OC
     Blattidae; Periplaneta.
OC
     NCBI TaxID=6978;
OX
RN
     [1]
```

```
RP
     SEQUENCE.
RC
     TISSUE=Corpora cardiaca;
RX
    MEDLINE=90137190; PubMed=2615921;
RA
     Veenstra J.A.;
     "Isolation and structure of two gastrin/CCK-like neuropeptides from
RT
     the American cockroach homologous to the leucosulfakinins.";
RT
     Neuropeptides 14:145-149(1989).
RL
     -!- FUNCTION: Stimulates hindgut contractions.
CC
     -!- SIMILARITY: Belongs to the gastrin/cholecystokinin family.
CC
     PIR; A60656; A60656.
DR
     InterPro; IPR001651; Gastrin.
DR
DR
     PROSITE; PS00259; GASTRIN; 1.
     Hormone; Amidation; Sulfation.
KW
     MOD RES
                          6
                                  SULFATION.
FT
                   6
                         11
                                  AMIDATION.
FT
     MOD RES
                  11
                11 AA; 1445 MW; 8B4E0680E86B5AAA CRC64;
SO
     SEQUENCE
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
                                                                      Gaps
                                                   0; Indels
                                                                              0;
             1; Conservative
                               0; Mismatches
                                                                  0;
            3 0 3
Qу
Db
            2 Q 2
RESULT 48
MLG THETS
                                            11 AA.
ID
     MLG THETS
                    STANDARD;
                                   PRT;
AC
     P41989;
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     16-OCT-2001 (Rel. 40, Last annotation update)
DT
     Melanotropin gamma (Gamma-melanocyte stimulating hormone) (Gamma-MSH).
DE
     Theromyzon tessulatum (Leech).
OS
     Eukaryota; Metazoa; Annelida; Clitellata; Hirudinida; Hirudinea;
OC
     Rhynchobdellida; Glossiphoniidae; Theromyzon.
OC
OX
     NCBI TaxID=13286;
RN
     [1]
     SEQUENCE.
RP
RC
     TISSUE=Brain;
     MEDLINE=94298944; PubMed=8026574;
     Salzet M., Wattez C., Bulet P., Malecha J.;
RA
     "Isolation and structural characterization of a novel peptide related
RT
     to gamma-melanocyte stimulating hormone from the brain of the leech
RT
RT
     Theromyzon tessulatum.";
     FEBS Lett. 348:102-106(1994).
RL
     -!- SIMILARITY: Belongs to the POMC family.
CC
     PIR; S45698; S45698.
DR
     Hormone; Amidation.
KW
FT
     MOD RES
                         11
                                  AMIDATION.
                  11
                        1486 MW;
                                  2DB8FACE6409C1E8 CRC64;
     SEQUENCE
SQ
                11 AA;
                            9.1%;
                                  Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1e+05;
  Best Local Similarity
                                 0; Mismatches
                                                    0; Indels
                                                                      Gaps
             1; Conservative
  Matches
```

```
6 M 6
QУ
            3 M 3
Db
RESULT 49
MORN HUMAN
    MORN HUMAN
                    STANDARD;
                                    PRT;
                                            11 AA.
ID
     P01163;
AC
     21-JUL-1986 (Rel. 01, Created)
DT
     21-JUL-1986 (Rel. 01, Last sequence update)
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
DT
    Morphogenetic neuropeptide (Head activator) (HA).
DE
OS
    Homo sapiens (Human),
     Rattus norvegicus (Rat),
OS
    Bos taurus (Bovine),
OS
OS
     Anthopleura elegantissima (Sea anemone), and
OS
     Hydra attenuata (Hydra) (Hydra vulgaris).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC
     NCBI TaxID=9606, 10116, 9913, 6110, 6087;
OX
RN
     [1]
RP
     SEQUENCE.
     SPECIES=Human, Rat, and Bovine;
RC
     MEDLINE=82035850; PubMed=7290191;
RX
     Bodenmuller H., Schaller H.C.;
RA
     "Conserved amino acid sequence of a neuropeptide, the head activator,
RT
     from coelenterates to humans.";
RT
     Nature 293:579-580(1981).
RL
RN
     [2]
RP
     SEQUENCE.
     SPECIES=A.elegantissima, and H.attenuata;
RC
     Schaller H.C., Bodenmuller H.;
RA
     "Isolation and amino acid sequence of a morphogenetic peptide from
RT
RT
     hydra.";
     Proc. Natl. Acad. Sci. U.S.A. 78:7000-7004(1981).
RL
RN
RP
     SYNTHESIS.
     MEDLINE=82050803; PubMed=7297679;
RX
     Birr C., Zachmann B., Bodenmuller H., Schaller H.C.;
RA
     "Synthesis of a new neuropeptide, the head activator from hydra.";
RT
     FEBS Lett. 131:317-321(1981).
RL
RN
     [4]
RP
     FUNCTION.
     MEDLINE=90059923; PubMed=2583101;
RX
     Schaller H.C., Druffel-Augustin S., Dubel S.;
RA
     "Head activator acts as an autocrine growth factor for NH15-CA2 cells
RT
RT
     in the G2/mitosis transition.";
RL
     EMBO J. 8:3311-3318(1989).
     -!- FUNCTION: HA acts as an autocrine growth factor for neural cells
CC
CC
         in the G2/mitosis transition.
CC
     -!- CAUTION: This peptide was first isolated from nerve cells of hydra
         and was called head activator by the authors, because it induced
CC
         head-specific growth and differentiation in this animal. It has
CC
         been found in mammalian intestine and hypothalamus.
CC
DR
     PIR; A01427; YHRT.
```

DR

PIR; A93900; YHXAE.

```
PIR; B01427; YHHU.
DR
     PIR; B93900; YHJFHY.
DR
     PIR; C01427; YHBO.
DR
     GK; P01163; -.
DR
     Growth factor; Cell cycle; Mitosis; Pyrrolidone carboxylic acid.
KW
     MOD RES
FT
                          1
                                  PYRROLIDONE CARBOXYLIC ACID.
                11 AA; 1142 MW; 37927417C325B878 CRC64;
     SEOUENCE
SQ
 Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1e+05;
            1; Conservative
                               0; Mismatches
                                                   0; Indels
                                                                  0;
                                                                      Gaps
                                                                              0;
Qy
            3 0 3
              1
Db
            1 Q 1
RESULT 50
NUHM CANFA
     NUHM CANFA
                    STANDARD;
                                   PRT;
                                           11 AA.
AC
     P49820;
     01-OCT-1996 (Rel. 34, Created)
DT
     15-JUL-1998 (Rel. 36, Last sequence update)
DT
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DE
     NADH-ubiquinone oxidoreductase 24 kDa subunit (EC 1.6.5.3)
DE
     (EC 1.6.99.3) (Fragment).
GN
    NDUFV2.
OS
     Canis familiaris (Dog).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
     Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OC
OX
     NCBI TaxID=9615;
RN
     [1]
RP
     SEQUENCE.
RC
    TISSUE=Heart;
RX
    MEDLINE=98163340; PubMed=9504812;
     Dunn M.J., Corbett J.M., Wheeler C.H.;
RA
RT
     "HSC-2DPAGE and the two-dimensional gel electrophoresis database of
RT
     dog heart proteins.";
     Electrophoresis 18:2795-2802(1997).
RL
CC
     -!- FUNCTION: TRANSFER OF ELECTRONS FROM NADH TO THE RESPIRATORY
         CHAIN. THE IMMEDIATE ELECTRON ACCEPTOR FOR THE ENZYME IS BELIEVED
CC
         TO BE UBIQUINONE. COMPONENT OF THE FLAVOPROTEIN-SULFUR (FP)
CC
CC
         FRAGMENT OF THE ENZYME.
CC
     -!- CATALYTIC ACTIVITY: NADH + ubiquinone = NAD(+) + ubiquinol.
     -!- CATALYTIC ACTIVITY: NADH + acceptor = NAD(+) + reduced acceptor.
CC
     -!- COFACTOR: Binds 1 2Fe-2S cluster (Potential).
СC
     -!- SUBUNIT: Mammalian complex I is composed of 45 different subunits.
CC
CC
     -!- SUBCELLULAR LOCATION: Matrix and cytoplasmic side of the
CC
         mitochondrial inner membrane.
CC
     -!- SIMILARITY: Belongs to the complex I 24 kDa subunit family.
DR
    HSC-2DPAGE; P49820; DOG.
     InterPro; IPR002023; Cmplx1 24kDa.
     PROSITE; PS01099; COMPLEX1 24K; PARTIAL.
DR
KW
     Oxidoreductase; NAD; Ubiquinone; Mitochondrion; Metal-binding;
KW
     Iron-sulfur; Iron; 2Fe-2S.
FT
     NON TER
                  11
                         11
                11 AA; 1099 MW; 267F5369C9C72DD8 CRC64;
SQ
     SEQUENCE
```

```
Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
            1; Conservative
                                0; Mismatches 0; Indels
                                                                  0; Gaps
 Matches
Qy
            1 A 1
             2 A 2
Db
RESULT 51
NXSN PSETE
ID
    NXSN PSETE
                    STANDARD;
                                   PRT;
                                           11 AA.
AC
     P59072;
DT
     28-FEB-2003 (Rel. 41, Created)
     28-FEB-2003 (Rel. 41, Last sequence update)
DΤ
DT
     28-FEB-2003 (Rel. 41, Last annotation update)
     Short neurotoxin N1 (Alpha neurotoxin) (Fragment).
OS
     Pseudonaja textilis (Eastern brown snake).
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
oc
     Lepidosauria; Squamata; Scleroglossa; Serpentes; Colubroidea;
OC
OC
     Elapidae; Acanthophiinae; Pseudonaja.
OX
     NCBI TaxID=8673;
RN
     [1]
RP
     SEQUENCE, AND MASS SPECTROMETRY.
RC
     TISSUE=Venom;
    MEDLINE=99449602; PubMed=10518793;
RX
     Gong N.L., Armugam A., Jeyaseelan K.;
RA
     "Postsynaptic short-chain neurotoxins from Pseudonaja textilis: cDNA
RT
     cloning, expression and protein characterization.";
RT
     Eur. J. Biochem. 265:982-989(1999).
RL
     -!- FUNCTION: Lethal neurotoxin, binds and inhibits nicotinic
CC
CC
         acetylcholine receptors (nAChR).
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Expressed by the venom gland.
CC
     -!- MASS SPECTROMETRY: MW=6236; METHOD=Electrospray.
CC
     -!- MISCELLANEOUS: LD(50) is 0.84 mg/kg by intravenous injection.
CC
     -!- SIMILARITY: Belongs to the snake toxin family.
CC
     InterPro; IPR003571; Snake toxin.
DR
     PROSITE; PS00272; SNAKE TOXIN; PARTIAL.
DR
KW
     Toxin; Neurotoxin; Postsynaptic neurotoxin;
KW
     Acetylcholine receptor inhibitor; Multigene family.
FT
     UNSURE
                   3
                          3
     NON TER
                  11
                         11
FT
SO
     SEQUENCE
                11 AA; 1319 MW;
                                  0D1EF0C81B58732B CRC64;
                           9.1%; Score 1; DB 1; Length 11;
                          100.0%; Pred. No. 1e+05;
  Best Local Similarity
                               0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
 Matches
            1; Conservative
            5 T 5
Qу
              - [
            2 T 2
Db
```

RESULT 52 PQQC PSEFL

```
PQQC PSEFL
                                 PRT: 11 AA.
ΙD
                   STANDARD;
    P55173;
AC
     01-OCT-1996 (Rel. 34, Created)
DT
     01-OCT-1996 (Rel. 34, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
    Coenzyme PQQ synthesis protein C (Pyrroloquinoline quinone
    biosynthesis protein C) (Fragment).
DE
GN
    PQQC.
OS
    Pseudomonas fluorescens.
OC
    Bacteria; Proteobacteria; Gammaproteobacteria; Pseudomonadales;
    Pseudomonadaceae; Pseudomonas.
OC
    NCBI TaxID=294;
OX
RN
     [1]
RΡ
     SEQUENCE FROM N.A.
RC
    STRAIN=CHA0:
    MEDLINE=96064397; PubMed=8526497;
RX
     Schnider U., Keel C., Defago G., Haas D.;
RA
     "Tn5-directed cloning of pqq genes from Pseudomonas fluorescens CHAO:
RT
    mutational inactivation of the genes results in overproduction of the
RT
    antibiotic pyoluteorin.";
RT
    Appl. Environ. Microbiol. 61:3856-3864(1995).
RL
CC
     -!- PATHWAY: Pyrroloquinoline quinone (PQQ) biosynthesis.
    -!- SIMILARITY: Belongs to the pqqC family.
CC
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    between the Swiss Institute of Bioinformatics and the EMBL outstation -
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    or send an email to license@isb-sib.ch).
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     _____
CC
DR
     EMBL; X87299; CAA60734.1; -.
DR
    PIR; S58244; S58244.
    HAMAP; MF 00654; -; 1.
DR
KW
     PQQ biosynthesis.
    NON TER
FT
               11
                        11
     SEQUENCE 11 AA; 1182 MW; 89DF46E4C5B73771 CRC64;
SQ
                          9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1e+05;
           1; Conservative 0; Mismatches 0; Indels 0; Gaps
  Matches
                                                                          0;
            6 M 6
Qу
Db
           1 M 1
RESULT 53
PVK1 PERAM
ID
     PVK1 PERAM
                   STANDARD;
                                  PRT;
                                         11 AA.
     P41837;
AC
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     16-OCT-2001 (Rel. 40, Last annotation update)
DT
     Periviscerokinin-1 (Pea-PVK-1).
DE
     Periplaneta americana (American cockroach).
OS
```

```
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Orthopteroidea; Dictyoptera; Blattaria; Blattoidea;
OC
     Blattidae; Periplaneta.
OC
     NCBI TaxID=6978;
OX
RN
     [1]
RP
     SEQUENCE, AND SYNTHESIS.
     TISSUE=Abdominal perisympathetic organs;
RC
     MEDLINE=95232021; PubMed=7716075;
RX
     Predel R., Linde D., Rapus J., Vettermann S., Penzlin H.;
RA
RT
     "Periviscerokinin (Pea-PVK): a novel myotropic neuropeptide from the
RT
     perisympathetic organs of the American cockroach.";
     Peptides 16:61-66(1995).
RL
     -!- FUNCTION: MYOACTIVE PEPTIDE; HAS EXCITORY ACTIONS ON THE
CC
CC
         HYPERNEURAL MUSCLE.
KW
     Neuropeptide; Amidation.
     MOD RES
                 11
                         11
                                  AMIDATION.
FT
SQ
     SEQUENCE
                11 AA; 1114 MW;
                                  39DB5419D7605728 CRC64;
  Query Match
                           9.1%; Score 1; DB 1;
                                                    Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
                                                                               0:
  Matches
             1; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                  0; Gaps
Qу
            1 A 1
            2 A 2
Db
RESULT 54
RANC RANPI
ID
     RANC RANPI
                    STANDARD;
                                    PRT;
                                            11 AA.
     P08951;
AC
DT
     01-NOV-1988 (Rel. 09, Created)
     01-NOV-1988 (Rel. 09, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DΕ
     Ranatensin-C.
     Rana pipiens (Northern leopard frog).
os
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae; Rana.
oc
OX
     NCBI TaxID=8404;
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Skin secretion;
RC
RX
     MEDLINE=84131098; PubMed=6141890;
RA
     Nakajima T.;
     Unpublished results, cited by:
RL
     Erspamer V., Erspamer G.F., Mazzanti G., Endean R.;
RL
     Comp. Biochem. Physiol. 77C:99-108(1984).
RL
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the bombesin/neuromedin B/ranatensin
CC
CC
         family.
     InterPro; IPR000874; Bombesin.
DR
     Pfam; PF02044; Bombesin; 1.
DR
DR
     PROSITE; PS00257; BOMBESIN; 1.
     Amphibian defense peptide; Bombesin family; Amidation.
KW
                                   AMIDATION.
FT
     MOD RES
                  11
                         11
                11 AA; 1304 MW; D6C9885A61ADC366 CRC64;
     SEQUENCE
SQ
```

```
Query Match
                        9.1%; Score 1; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1e+05;
          1; Conservative 0; Mismatches
                                              0; Indels 0; Gaps
                                                                       0;
 Matches
          5 T 5
Qy
          2 T 2
Db
RESULT 55
RRPL CHAV
                  STANDARD;
                            PRT; 11 AA.
    RRPL CHAV
ID
    P13179;
AC
DT
    01-JAN-1990 (Rel. 13, Created)
    01-JAN-1990 (Rel. 13, Last sequence update)
DT
    28-FEB-2003 (Rel. 41, Last annotation update)
DT
DE
    RNA polymerase beta subunit (EC 2.7.7.48) (Large structural protein)
    (L protein) (Fragment).
DΕ
GN
OS
    Chandipura virus (strain 1653514).
OC
    Viruses; ssRNA negative-strand viruses; Mononegavirales;
OC
    Rhabdoviridae; Vesiculovirus.
OX
    NCBI TaxID=11273;
RN
    [1]
RP
    SEQUENCE FROM N.A.
RX
    MEDLINE=89299473; PubMed=2741347;
    Masters P.S., Bhella R.S., Butcher M., Patel B., Ghosh H.P.,
RA
RA
    Banerjee A.K.;
    "Structure and expression of the glycoprotein gene of Chandipura
RT
RT
    virus.";
    Virology 171:285-290(1989).
RL
    -!- FUNCTION: THIS PROTEIN IS PROBABLY A COMPONENT OF THE ACTIVE
CC
        POLYMERASE. IT MAY FUNCTION IN RNA SYNTHESIS, CAPPING, AS WELL AS
CC
        METHYLATION OF CAPS, AND POLY(A) SYNTHESIS.
CC
    -!- CATALYTIC ACTIVITY: N nucleoside triphosphate = N diphosphate +
CC
CC
        {RNA}(N).
    -!- SUBUNIT: THOUGHT TO FORM A TRANSCRIPTION COMPLEX WITH THE
CC
        NUCLEOCAPSID (N) PROTEIN.
CC
    -!- SIMILARITY: WITH THE L PROTEIN OF OTHER RHABDOVIRUSES AND
CC
        PARAMYXOVIRUSES.
CC
    CC
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     _____
CC
    EMBL; J04350; AAA42917.1; -.
DR
KW
    Transferase; RNA-directed RNA polymerase.
FT
    NON TER
                11
                       11
    SEQUENCE 11 AA; 1189 MW; 0335D6E3AAB2D764 CRC64;
SO
                        9.1%; Score 1; DB 1; Length 11;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 1e+05;
```

```
1; Conservative 0; Mismatches 0; Indels 0; Gaps
 Matches
                                                                         0;
           6 M 6
Qу
           1 M 1
Db
RESULT 56
T2P1 PROVU
    T2P1 PROVU
                   STANDARD;
                               PRT;
                                       11 AA.
TD
AC
    P31031;
    01-JUL-1993 (Rel. 26, Created)
DT
    01-JUL-1993 (Rel. 26, Last sequence update)
DT
    10-OCT-2003 (Rel. 42, Last annotation update)
DT
    Type II restriction enzyme PvuI (EC 3.1.21.4) (Endonuclease PvuI)
DE
DE
    (R.PvuI) (Fragment).
GN
    PVUIR.
OS
    Proteus vulgaris.
OC
    Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales;
OC
    Enterobacteriaceae; Proteus.
OX
    NCBI TaxID=585;
RN
    [1]
RP
    SEQUENCE FROM N.A.
RC
    STRAIN=ATCC 13315;
RX
    MEDLINE=93087186; PubMed=1454536;
RA
    Smith M.D., Longo M., Gerard G.F., Chatterjee D.K.;
    "Cloning and characterization of genes for the PvuI restriction and
RT
    modification system.";
RT
    Nucleic Acids Res. 20:5743-5747(1992).
RL
    -!- FUNCTION: RECOGNIZES THE DOUBLE-STRANDED SEQUENCE CGATCG AND
CC
CC
        CLEAVES AFTER T-4.
CC
    -!- CATALYTIC ACTIVITY: Endonucleolytic cleavage of DNA to give
        specific double-stranded fragments with terminal 5'-phosphates.
CC
    _____
CC
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CC
CC
DR
    EMBL; L04163; AAA25660.1; -.
DR
    PIR; S35490; S35490.
    REBASE; 1541; PvuI.
DR
    Restriction system; Hydrolase; Nuclease; Endonuclease.
KW
FT
    NON TER
                 1
    SEQUENCE 11 AA; 1300 MW; 9F0CDE7955B72B1A CRC64;
SO
 Query Match
                         9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity 100.0%; Pred. No. 1e+05;
           1; Conservative 0; Mismatches
                                                              0; Gaps
 Matches
                                              0; Indels
                                                                         0;
          11 S 11
Qy
            - 1
           2 S 2
Db
```

```
RESULT 57
TIN4 HOPTI
     TIN4 HOPTI
                    STANDARD;
ID
                                    PRT;
                                            11 AA.
AC
     P82654;
DΤ
     16-OCT-2001 (Rel. 40, Created)
DT
     16-OCT-2001 (Rel. 40, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DE
     Tigerinin-4.
OS
     Hoplobatrachus tigerinus (Indian bull frog) (Rana tigerina).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Ranoidea; Ranidae;
OC
     Hoplobatrachus.
OX
     NCBI_TaxID=103373;
RN
     [\cdot 1]
RP
     SEQUENCE, FUNCTION, MASS SPECTROMETRY, AND DISULFIDE BONDS.
RC
     TISSUE=Skin secretion;
RX
     PubMed=11031261;
RA
     Purna Sai K., Jaganadham M.V., Vairamani M., Raju N.P.,
RA
     Devi A.S., Nagaraj R., Sitaram N.;
RT
     "Tigerinins: novel antimicrobial peptides from the Indian frog Rana
RT
     tigerina.";
RL
     J. Biol. Chem. 276:2701-2707(2001).
CC
     -!- FUNCTION: Antibacterial activity against B.subtilis, E.coli,
CC
         S.aureus, M.luteus, P.putida and S.cerevisiae.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- MASS SPECTROMETRY: MW=1247; METHOD=MALDI.
KW
     Amphibian defense peptide; Antibiotic.
FT
     DISULFID
                   3
                         11
SQ
     SEQUENCE
                11 AA;
                        1248 MW;
                                  117D8EFD37605DCB CRC64;
  Query Match
                            9.1%;
                                  Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
             1; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                               0;
                                                                   0; Gaps
            2 R 2
Qу
Db
            1 R 1
RESULT 58
TKC2 CALVO
     TKC2 CALVO
ΙD
                    STANDARD;
                                    PRT:
                                            11 AA.
AC
     P41518;
DT
     01-NOV-1995 (Rel. 32, Created)
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Callitachykinin II.
OS
     Calliphora vomitoria (Blue blowfly).
OC
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Oestroidea;
OC
     Calliphoridae; Calliphora.
     NCBI TaxID=27454;
OX
RN
     [1]
     SEQUENCE, AND SYNTHESIS.
RP
RX
     MEDLINE=95075727; PubMed=7984492;
```

```
RA
     Lundquist C.T., Clottens F.L., Holman G.M., Nichols R., Nachman R.J.,
RA
     "Callitachykinin I and II, two novel myotropic peptides isolated from
RT
RT
     the blowfly, Calliphora vomitoria, that have resemblances to
     tachykinins.";
RT
RL
     Peptides 15:761-768(1994).
CC
     -!- FUNCTION: Myoactive peptide.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- SIMILARITY: SOME SIMILARITY TO TACHYKININS.
KW
     Tachykinin; Neuropeptide; Amidation.
FT
     MOD RES
                  11
                         11
                                   AMIDATION.
     SEQUENCE
                11 AA;
SQ
                        1103 MW;
                                  15D7E3F9C9CDD444 CRC64;
  Query Match
                            9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
  Matches
             1; Conservative
                                  0; Mismatches
                                                    0;
                                                        Indels
                                                                   0; Gaps
                                                                               0;
Qу
            1 A 1
Db
            6 A 6
RESULT 59
TKN1 PSEGU
ID
     TKN1 PSEGU
                    STANDARD;
                                    PRT;
                                            11 AA.
AC
     P42986;
DT
     01-NOV-1995 (Rel. 32, Created)
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Kassinin-like peptide K-I (PG-KI).
OS
     Pseudophryne guentheri (Guenther's toadlet).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC.
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Pseudophryne.
OX
     NCBI TaxID=30349;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Skin secretion;
RX
     MEDLINE=90287814; PubMed=2356157;
RA
     Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA
     Roberts J.D., Melchiorri P., Erspamer V.;
RT
     "Six novel tachykinin- and bombesin-related peptides from the skin of
RT
     the Australian frog Pseudophryne guntheri.";
RL
     Peptides 11:299-304(1990).
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
DR
     PIR; B60409; B60409.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
     Pfam; PF02202; Tachykinin; 1.
DR
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
```

```
KW
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
     Pyrrolidone carboxylic acid.
     MOD RES
FT
                   1
                           1
                                   PYRROLIDONE CARBOXYLIC ACID.
     MOD RES
FT
                  11
                          11
                                   AMIDATION.
SQ
     SEQUENCE
                11 AA;
                       1269 MW;
                                   3DBA7C37C9CB1AB7 CRC64;
  Query Match
                           9.1%;
                                   Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
                                  0; Mismatches
                Conservative
                                                    0; Indels
                                                                   0; Gaps
                                                                               0;
            3 0 3
Qу
Db
            1 0 1
RESULT 60
TKN1 UPEIN
     TKN1 UPEIN
                    STANDARD;
                                    PRT;
                                            11 AA.
AC
     P82026;
     30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
DT
DT
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DE
     Uperin 1.1.
OS
     Uperoleia inundata (Floodplain toadlet).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Uperoleia.
OX
     NCBI TaxID=104953;
RN
     [1]
RP
     SEQUENCE, AND MASS SPECTROMETRY.
     TISSUE=Skin secretion;
RC
     Bradford A.M., Raftery M.J., Bowie J.H., Tyler M.J., Wallace J.C.,
RA
RA
     Adams G.W., Severini C.;
RT
     "Novel uperin peptides from the dorsal glands of the australian
RT
     floodplain toadlet Uperoleia inundata.";
     Aust. J. Chem. 49:475-484(1996).
RL
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Skin dorsal glands.
CC
CC
     -!- MASS SPECTROMETRY: MW=1208; METHOD=FAB.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
     InterPro; IPR002040; Tachy Neurokinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
DR
     PROSITE; PS00267; TACHYKININ; 1.
KW
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
     Pyrrolidone carboxylic acid.
FT
     MOD RES
                   1
                          1
                                   PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                  11
                         11
                                  AMIDATION.
     SEQUENCE
                11 AA;
                        1226 MW; 3293693E59CDD457 CRC64;
SQ
                           9.1%; Score 1; DB 1; Length 11;
  Query Match
                          100.0%; Pred. No. 1e+05;
  Best Local Similarity
             1; Conservative
                               0; Mismatches 0; Indels
  Matches
                                                                   0;
                                                                       Gaps
                                                                               0;
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```
Qу
            3 Q 3
            1 Q 1
Db
RESULT 61
TKN1 UPERU
     TKN1 UPERU
                    STANDARD;
ΙD
                                    PRT;
                                            11 AA.
     P08612;
AC
DT
     01-AUG-1988 (Rel. 08, Created)
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Uperolein.
OS
     Uperoleia rugosa (Wrinkled toadlet).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Uperoleia.
OX
     NCBI TaxID=8368;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Skin secretion;
RX
     MEDLINE=75131227; PubMed=1120493;
RA
     Anastasi A., Erspamer V., Endean R.;
RT
     "Structure of uperolein, a physalaemin-like endecapeptide occurring
RT
     in the skin of Uperoleia rugosa and Uperoleia marmorata.";
     Experientia 31:394-395(1975).
RL
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
     SMART; SM00203; TK; 1.
DR
DR
     PROSITE; PS00267; TACHYKININ; 1.
ΚW
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
     Pyrrolidone carboxylic acid.
FT
     MOD RES
                   1
                                  PYRROLIDONE CARBOXYLIC ACID.
                          1
FT
     MOD RES
                  11
                         11
                                  AMIDATION.
                11 AA; 1252 MW;
SO
     SEQUENCE
                                  32867C3E59CDD457 CRC64;
  Query Match
                                  Score 1; DB 1; Length 11;
                           9.1%;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
  Matches
             1; Conservative
                                                                  0; Gaps
                               0; Mismatches
                                                    0; Indels
                                                                               0;
            3 Q 3
Qy
              1
            1 Q 1
RESULT 62
TKN2 PSEGU
     TKN2 PSEGU
ID
                    STANDARD;
                                   PRT;
                                            11 AA.
AC
     P42987;
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\mathbf{DT}
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Kassinin-like peptide K-II (PG-KII).
DΕ
OS
     Pseudophryne guentheri (Guenther's toadlet).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Pseudophryne.
OX
     NCBI TaxID=30349;
RN
     [1]
RP
     SEQUENCE.
     TISSUE=Skin secretion;
RC
RX
     MEDLINE=90287814; PubMed=2356157;
RA
     Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
     Roberts J.D., Melchiorri P., Erspamer V.;
RA
     "Six novel tachykinin- and bombesin-related peptides from the skin of
RT
RT
     the Australian frog Pseudophryne guntheri.";
RL
     Peptides 11:299-304(1990).
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
CC
     -!- TISSUE SPECIFICITY: Skin.
     -!- SIMILARITY: Belongs to the tachykinin family.
     PIR; C60409; C60409.
DR
DR
     InterPro; IPR002040; Tachy Neurokinin.
     InterPro; IPR008215; Tachykinin.
DR
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
     PROSITE; PS00267; TACHYKININ; 1.
DR
KW
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
     Pyrrolidone carboxylic acid.
FT
     MOD RES
                   1
                          1
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                  11
                         11
                                  AMIDATION.
SQ
     SEQUENCE
                11 AA; 1246 MW; 3A247C37C9CB1AB7 CRC64;
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
  Matches
             1; Conservative
                                 0; Mismatches
                                                                  0; Gaps
                                                                               0;
                                                   0; Indels
Qу
            3 0 3
Db
            1 Q 1
RESULT 63
TKN3 PSEGU
ID
     TKN3 PSEGU
                    STANDARD;
                                   PRT;
                                            11 AA.
AC
     P42988;
DT
     01-NOV-1995 (Rel. 32, Created)
DT
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DE
     Kassinin-like peptide K-III (PG-KIII).
OS
     Pseudophryne guentheri (Guenther's toadlet).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
```

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Myobatrachinae; Pseudophryne.
OC
     NCBI TaxID=30349;
OX
     [1]
RN
     SEQUENCE.
RP
     TISSUE=Skin secretion;
RC
     MEDLINE=90287814; PubMed=2356157;
RX
     Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA
     Roberts J.D., Melchiorri P., Erspamer V.;
RA
     "Six novel tachykinin- and bombesin-related peptides from the skin of
RT
RT
     the Australian frog Pseudophryne guntheri.";
     Peptides 11:299-304(1990).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
     -!- SUBCELLULAR LOCATION: Secreted.
CC
CC
     -!- TISSUE SPECIFICITY: Skin.
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
DR
     PIR; D60409; D60409.
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
DR
     Pfam; PF02202; Tachykinin; 1.
     SMART; SM00203; TK; 1.
DR
DR
     PROSITE; PS00267; TACHYKININ; 1.
KW
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
ΚW
     Pyrrolidone carboxylic acid.
     MOD RES
                   1
                          1
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
FT
     MOD RES
                  11
                         11
                                  AMIDATION.
     SEQUENCE
                11 AA; 1268 MW; 3DBA7C37C9CB1457 CRC64;
SO
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
                          100.0%; Pred. No. 1e+05;
  Best Local Similarity
             1; Conservative
                                 0; Mismatches
                                                                  0; Gaps
                                                                               0;
 Matches
                                                        Indels
                                                    0;
            3 Q 3
Qу
            1 Q 1
Db
RESULT 64
TKN4 PSEGU
     TKN4 PSEGU
                                   PRT;
                                            11 AA.
ID
                    STANDARD;
AC
     P42989;
     01-NOV-1995 (Rel. 32, Created)
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
     Substance P-like peptide I (PG-SPI).
DE
OS
     Pseudophryne guentheri (Guenther's toadlet).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Pseudophryne.
OX
     NCBI TaxID=30349;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Skin secretion;
     MEDLINE=90287814; PubMed=2356157;
RX
     Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA
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Roberts J.D., Melchiorri P., Erspamer V.;
RA
     "Six novel tachykinin- and bombesin-related peptides from the skin of
RT
RT
     the Australian frog Pseudophryne guntheri.";
     Peptides 11:299-304(1990).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
CC
         evoke behavioral responses, are potent vasodilators and
         secretagogues, and contract (directly or indirectly) many smooth
CC
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
DR
     PIR; E60409; E60409.
     InterPro; IPR002040; Tachy Neurokinin.
DR
DR
     InterPro; IPR008215; Tachykinin.
     Pfam; PF02202; Tachykinin; 1.
DR
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
KW
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
     Pyrrolidone carboxylic acid.
FT
     MOD RES
                   1
                          1
                                   PYRROLIDONE CARBOXYLIC ACID.
     MOD RES
FT
                  11
                         11
                                   AMIDATION.
SQ
     SEQUENCE
                11 AA;
                        1294 MW;
                                   3A247C2CC9CB1AB7 CRC64;
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
  Matches
             1; Conservative
                                 0; Mismatches
                                                    0; Indels
                                                                       Gaps
                                                                               0;
            3 Q 3
Qу
Db
            1 Q 1
RESULT 65
TKN5 PSEGU
     TKN5 PSEGU
                    STANDARD;
                                    PRT;
                                            11 AA.
AC
     P42990;
DT
     01-NOV-1995 (Rel. 32, Created)
     01-NOV-1995 (Rel. 32, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DΕ
     Substance P-like peptide II (PG-SPII).
OS
     Pseudophryne guentheri (Guenther's toadlet).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Myobatrachidae;
OC
     Myobatrachinae; Pseudophryne.
OX
     NCBI TaxID=30349;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Skin secretion;
RX
     MEDLINE=90287814; PubMed=2356157;
RA
     Simmaco M., Severini C., de Biase D., Barra D., Bossa F.,
RA
     Roberts J.D., Melchiorri P., Erspamer V.;
RT
     "Six novel tachykinin- and bombesin-related peptides from the skin of
RT
     the Australian frog Pseudophryne guntheri.";
RL
     Peptides 11:299-304(1990).
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
CC
         evoke behavioral responses, are potent vasodilators and
         secretagogues, and contract (directly or indirectly) many smooth
CC
```

```
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Skin.
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
CC
     PIR; F60409; F60409.
DR
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     InterPro; IPR008215; Tachykinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
     SMART; SM00203; TK; 1.
DR
     PROSITE; PS00267; TACHYKININ; 1.
KW
     Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
ΚW
     Pyrrolidone carboxylic acid.
FT
     MOD RES
                   1
                          1
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                  11
                         11
                                  AMIDATION.
SQ
     SEQUENCE
                11 AA; 1293 MW; 3A247C2CC9CB1457 CRC64;
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
                                0; Mismatches
  Matches
             1; Conservative
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
Qy
            3 Q 3
              - 1
Db
            1 Q 1
RESULT 66
TKN ELEMO
     TKN ELEMO
                    STANDARD;
                                   PRT:
ID
                                           11 AA.
     P01293;
AC
DT
     21-JUL-1986 (Rel. 01, Created)
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DE
     Eledoisin.
OS
     Eledone moschata (Musky octopus) (Ozaena moschata), and
OS
     Eledone cirrhosa (Curled octopus) (Ozaena cirrosa).
     Eukaryota; Metazoa; Mollusca; Cephalopoda; Coleoidea; Neocoleoidea;
OC
     Octopodiformes; Octopoda; Incirrata; Octopodidae; Eledone.
OC
OX
     NCBI TaxID=6641, 102876;
RN
     [1]
RP
     SEQUENCE.
RA
     Anastasi A., Erspamer V.;
RT
     "The isolation and amino acid sequence of eledoisin, the active
RT
     endecapeptide of the posterior salivary glands of Eledone.";
     Arch. Biochem. Biophys. 101:56-65(1963).
RL
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
         muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
CC
     -!- TISSUE SPECIFICITY: Skin.
     -!- SIMILARITY: Belongs to the tachykinin family.
DR
     PIR; A01561; EOOC.
DR
     PIR; B01561; EOOCC.
     PDB; 1MXQ; 18-FEB-03.
DR
DR
     InterPro; IPR002040; Tachy Neurokinin.
DR
     PROSITE; PS00267; TACHYKININ; 1.
KW
     Tachykinin; Neuropeptide; Amidation; Pyrrolidone carboxylic acid;
```

```
KW
     3D-structure.
FT
     MOD RES
                   1
                          1
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
     MOD RES
                  11
                         11
                                  AMIDATION.
     SEQUENCE
                        1206 MW;
SO
                11 AA;
                                  570D7C2559CDDAA3 CRC64;
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
  Matches
             1; Conservative
                                0; Mismatches
                                                   0; Indels
                                                                      Gaps
                                                                              0;
            3 Q 3
Qy
              1
            1 Q 1
Db
RESULT 67
TKN PHYFU
ID
     TKN PHYFU
                    STANDARD;
                                   PRT:
                                            11 AA.
AC
     P08615;
DT
     01-AUG-1988 (Rel. 08, Created)
     01-FEB-1994 (Rel. 28, Last sequence update)
DT
     10-OCT-2003 (Rel. 42, Last annotation update)
DT
DE
     Physalaemin.
OS
     Physalaemus fuscumaculatus (Neotropical frog).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Leptodactylidae;
OC
     Leptodactylinae; Physalaemus.
OX
     NCBI TaxID=8378;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Skin secretion;
RX
     MEDLINE=66076612; PubMed=5857249;
RA
     Erspamer V., Anastasi A., Bertaccini G., Cei J.M.;
RT
     "Structure and pharmacological actions of physalaemin, the main
RT
     active polypeptide of the skin of Physalaemus fuscumaculatus.";
     Experientia 20:489-490(1964).
RL
CC
     -!- FUNCTION: Tachykinins are active peptides which excite neurons,
CC
         evoke behavioral responses, are potent vasodilators and
CC
         secretagogues, and contract (directly or indirectly) many smooth
CC
        muscles.
CC
     -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Skin.
CC
CC
     -!- SIMILARITY: Belongs to the tachykinin family.
DR
     PIR; S07201; S07201.
     InterPro; IPR002040; Tachy Neurokinin.
DR
     Pfam; PF02202; Tachykinin; 1.
DR
DR
     PROSITE; PS00267; TACHYKININ; 1.
KW
    Amphibian defense peptide; Tachykinin; Neuropeptide; Amidation;
KW
    Pyrrolidone carboxylic acid.
FT
    MOD RES
                   1
                          1
                                  PYRROLIDONE CARBOXYLIC ACID.
FT
    MOD RES
                  11
                         11
                                  AMIDATION.
SQ
    SEQUENCE
                11 AA; 1283 MW; 3293693E59C33457 CRC64;
 Query Match
                           9.1%; Score 1; DB 1; Length 11;
 Best Local Similarity
                          100.0%; Pred. No. 1e+05;
                Conservative
            1:
                               0; Mismatches
                                                   0; Indels
                                                                  0; Gaps
                                                                              0;
```

```
Db 1 Q 1
```

```
RESULT 68
UF05 MOUSE
     UF05 MOUSE
ID
                    STANDARD;
                                    PRT;
                                            11 AA.
AC
     P38643;
DT
     01-OCT-1994 (Rel. 30, Created)
     01-OCT-1994 (Rel. 30, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
DΕ
     Unknown protein from 2D-page of fibroblasts (P48) (Fragment).
OS
     Mus musculus (Mouse).
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX
     NCBI TaxID=10090;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Fibroblast;
RX
    MEDLINE=95009907; PubMed=7523108;
RA
     Merrick B.A., Patterson R.M., Wichter L.L., He C., Selkirk J.K.;
RT
     "Separation and sequencing of familiar and novel murine proteins
RT
     using preparative two-dimensional gel electrophoresis.";
RL
     Electrophoresis 15:735-745(1994).
CC
     -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown
CC
         protein is: 5.5, its MW is: 48 kDa.
     NON TER
FT
                  11
                         11
     SEQUENCE
SQ
                11 AA; 1328 MW; E54835E5CAAABAFA CRC64;
  Query Match
                           9.1%; Score 1; DB 1; Length 11;
  Best Local Similarity
                          100.0%; Pred. No. 1e+05;
  Matches
             1; Conservative
                               0; Mismatches
                                                    0; Indels
                                                                      Gaps
                                                                              0;
Qу
            4 K 4
              1 K 1
Db
RESULT 69
ULAG HUMAN
ΙD
    ULAG HUMAN
                    STANDARD;
                                   PRT:
                                           11 AA.
AC
     P31933;
DT
     01-JUL-1993 (Rel. 26, Created)
     01-JUL-1993 (Rel. 26, Last sequence update)
DT
     15-MAR-2004 (Rel. 43, Last annotation update)
DT
DΕ
     Unknown protein from 2D-page of liver tissue (Spot 118) (Fragment).
     Homo sapiens (Human).
OS
OC
     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX
     NCBI TaxID=9606;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Liver;
RX
    MEDLINE=94147969; PubMed=8313870;
RA
     Hughes G.J., Frutiger S., Paquet N., Pasquali C., Sanchez J.-C.,
RA
     Tissot J.-D., Bairoch A., Appel R.D., Hochstrasser D.F.;
RT
     "Human liver protein map: update 1993.";
```

```
Electrophoresis 14:1216-1222(1993).
CC
    -!- MISCELLANEOUS: On the 2D-gel the determined pI of this unknown
CC
        protein is: 5.5, its MW is: 34 kDa.
    SWISS-2DPAGE; P31933; HUMAN.
DR
    Siena-2DPAGE; P31933; -.
DR
FT
    NON TER
                 11
                        11
    SEQUENCE
               11 AA; 1219 MW; EDABD37F272DDB0A CRC64;
SQ
 Query Match
                           9.1%; Score 1; DB 1; Length 11;
 Best Local Similarity 100.0%; Pred. No. 1e+05;
                              0; Mismatches 0; Indels
                                                                 0; Gaps
                                                                             0;
 Matches
           1; Conservative
            3 0 3
Qу
Db
           3 Q 3
RESULT 70
RE41 LITRU
    RE41 LITRU
                   STANDARD;
                                   PRT;
                                           11 AA.
AC
    P82074;
DΤ
    28-FEB-2003 (Rel. 41, Created)
DT
    28-FEB-2003 (Rel. 41, Last sequence update)
DT
    10-OCT-2003 (Rel. 42, Last annotation update)
DE
    Rubellidin 4.1.
OS
    Litoria rubella (Desert tree frog).
    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC
    Amphibia; Batrachia; Anura; Neobatrachia; Hyloidea; Hylidae;
OC
OC
    Pelodryadinae; Litoria.
    NCBI TaxID=104895;
OX
RN
    [1]
RP
    SEQUENCE, AND MASS SPECTROMETRY.
    TISSUE=Skin secretion;
RC
    Steinborner S.T., Wabnitz P.A., Waugh R.J., Bowie J.H., Gao C.,
RA
    Tyler M.J., Wallace J.C.;
RA
     "The structure of new peptides from the Australin red tree frog
RT
     'Litoria rubella'. The skin peptide profile as a probe for the study
RT
RT
    of evolutionary trends of amphibians.";
RL
    Aust. J. Chem. 49:955-963(1996).
    -!- FUNCTION: Shows neither neuropeptide activity nor antibiotic
CC
CC
        activity.
CC
    -!- SUBCELLULAR LOCATION: Secreted.
     -!- TISSUE SPECIFICITY: Expressed by the skin dorsal glands.
CC
     -!- MASS SPECTROMETRY: MW=1039; METHOD=FAB.
CC
KW
     Amphibian defense peptide; Amidation.
FT
    MOD RES
                  11
                        11
                                  AMIDATION.
     SEQUENCE
               11 AA; 1040 MW; 84ED5CBC2877205A CRC64;
SO
                           0.0%; Score 0; DB 1; Length 11;
 Query Match
 Best Local Similarity
                         0.0%; Pred. No. 1.4e+05;
 Matches
            0; Conservative
                                 0; Mismatches
                                                  1; Indels
                                                                 0; Gaps
                                                                             0;
            1 A 1
Qу
            1 G 1
Db
```

RL

Search completed: April 8, 2004, 15:47:20

Job time : 5.15385 secs